ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division
PB 2606 , Mysore Road Bangalore , 560026 INDIA

CE: PR: 003- Rev 02

<u>SPECIAL COMMERCIAL CONDITIONS OF CONTRACT</u>

Reference is brought to BHEL's Instructions to Bidders (Document Ref: CE: PR: 001- Rev 03) and General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 02).

These two documents along with Special Conditions of Contract annexed to this RFQ will form an integral part of the contract as and when the RFQ culminates into a Purchase Order / Contract.

RFQ No.	**:** PVR0000274
RFQ Date	**:** 09-12-2023
RFQ Due Date	**:** 26-12-2023
Customer/Project	: NTPC/PATRATU (3x800 MW), MAHAGENCO/CHANDRAPUR R&M
Scope Description	**:** TEMPERATURE TRANSMITTERS (SINGLE INPUT DIN Rail type)

Kindly submit your quotation as **~~single/~~two/~~three~~ part bid** (Pre-Qualification Criteria and Techno-Commercial bid - 1st part & Price bid - 2nd part) in E-Procurement System portal: https://eprocurebhel.co.in within the Due- Date of 26-12-2023 before **13.00** hours IST and note that tenders will be opened on the same day at **15.30** hours IST.

Purchase Executives: Clarifications with regard to the tender shall be addressed to purchase officers whose e-mail IDs are given below:

poojavrao@bhel.in or saravanababu@bhel.in

~~**Splitting of tendered quantity to MSE vendors:** The tendered quantity will be split to MSE vendor/s subject to submission of relevant document/s by vendors. Refer clause: I of Instructions to Bidders for conditions applicable and for information on document/s to be submitted. *(Strike off, if not applicable)*~~

<u>Destination</u>: For Indigenous scope of supply, items are to be directly despatched to BHEL site office/stores located near **PATRATU** in **JHARKHAND** state and **CHANDRAPUR** in **MAHARASHTRA** state, India for respective items. Detailed Consignee details will be issued by BHEL along with Despatch Clearance.

Imported scope of supply:
~~a) DEEC / SEZ/EPCG/DFIA/ Physical Export contract: Eligible for "NIL" Basic Customs Duty.~~
~~b) Project Imports: Eligible for Concessional Basic Custom Duty.~~
~~c) Basic Custom duty and Cess on Basic Custom duty are reimbursable by customer.~~

<u>Terms of Delivery:</u>

- **<u>Indigenous scope of supply:</u>** Ex-works, <indicate station of dispatch> (including Packing & Forwarding charges but excluding Taxes).

- ~~**Imported scope of supply:**~~

  ~~F.C.A. (for air consignments) < indicate international port of dispatch > / C.I.F. (for sea consignments) < ICD, Bangalore > (including Packing, Forwarding, Handling, Ancillary charges like processing of Sight Draft/ Letter of Credit, negotiation of bank documents, Export declaration, Country of Origin etc.).~~

~~Kindly indicate the approximate weight of the total imported consignment, which is required for calculating air-freight charges:~~______________

Under-mentioned details shall be provided against indigenous supplies & services:

a. GSTIN of place of supply : __________________________

b. HSN (Harmonized System of Nomenclature) code : __________________________
Applicable tax and Rate : ____________&_____________

c. GSTIN of place of supply of service :

d. SAC (Service Accounting Code) :___________________________
Applicable tax and Rate : ____________&_____________

e. GeM Seller ID is mandatorily required for PO placement: __________________________

f. If bidder is MSE vendor, are supporting documents enclosed: Yes /No
(If MSE, supporting documents viz., Udyam certificate to be enclosed)

I. Bidders to mandatorily provide confirmation/compliance for the under-mentioned terms:

SL NO.	TERMS	BHEL ACCEPTABLE TERM	BIDDER'S CONFIRMATION	REMARKS,if any
01	~~**Reverse Auction (RA)**~~ ~~*(strike off, if not applicable)*~~	~~BHEL shall be resorting to Reverse Auction (Guidelines as available on http://www.bhel.com/index.php/vender) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.~~ ~~Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.~~	~~AGREE~~	
02	~~**Parting of license for imported raw materials**~~ ~~*(strike off, if not applicable)*~~	~~In case of projects where Basic Custom Duty is NIL and vendor is importing any raw materials / components for the enquired item, same are eligible for Zero Customs duty. As per EXIM policy, BHEL will part the import licence with the vendors to obtain import licence by themselves and custom clear the raw materials/ components by availing zero customs duty. Hence, please furnish list of raw materials / components to be imported by you with Quantity and CIF value (for which BHEL has to share import licence). The benefit due to the above shall be passed on to BHEL and confirmed in the quotation.~~	~~AGREE~~ ~~CIF value …………~~ ~~Yes, benefit passed-on to BHEL in the priced quotation.~~ ~~(or)~~ ~~We confirm that there are no imported components~~	

		~~If there are no imported raw materials/ components, same shall be confirmed in the offer.~~		
03	**Delivery Period**	Within 12 weeks from the date of issue of Manufacturing clearance along with approved document. Delay in contractual delivery will attract Penalty as per GCC Clause no.:04 b. Delivery period mentioned is only indicative. Please enter your best lead-time in BIDDER'S CONFIRMATION column. However, it may be noted that the delivery period mentioned in the RFQ shall be met by vendors. In case, the delivery period mentioned in the tender is not met; BHEL reserves the right to reject such offers. Tentative Delivery Schedule: **Patratu project:** Units-1 & 2: Jan 2024 Unit-3: Jun 2024 Mandatory Spares: Dec 2024 **Chandrapur project:** Units-5 & 6: Jan 2024 Mandatory Spares: May 2024	AGREE ……………… weeks	
04	**Terms of Payment at the time of material supply** <u>Note</u>: MSME vendors may opt to get payment through Trade Receivables Discounting System (TReDS)	Refer Clause "F" of Instructions to Bidder for BHEL standard Payment terms and loading factors applicable for non-compliance against payment terms: **Indigenous Scope :** ~~a)Supply with Service(s)~~ b)Supply only ~~**Imported Scope :**~~ ~~c)Supply with Service(s)~~ ~~d)Supply only~~ ~~**High-Sea sales :**~~ ~~e)Supply with Service(s)~~ ~~f)Supply only~~ **Spares :** b) ~~and/or d)/f)~~ depending upon the scope	AGREE	
05	**Declaration of local content,** as the case may be.	''Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent. (Refer Clause 'A' Sl. No. 12 of Instructions to Bidders).	Percentage of local content: _____% Details of the Location(s) at which the local value addition is made: _______________	
06	Declaration as a compliance to Rule 144(xi)	The below declaration is to be submitted on Company Letter head duly signed and sealed by		

	of GFR, 2017 amendment dt 23.07.2020 & 24.02.2023 issued by Ministry of Finance, Govt. of India.	authorised signatory, for ascertaining the eligibility of offer in the tender. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that our firm is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that our firm fulfils all requirements in this regard and is eligible to be considered." (Refer Clause 'A' Sl. No. 13 of Instructions to Bidders). <u>Note</u>: Wherever applicable, evidence of valid registration by the Competent Authority shall be attached. <u>Additional declaration by Bidder in the cases of specified Transfer of Technology (ToT):</u> "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that our firm does not have any ToT arrangement requiring registration with the Competent Authority." OR "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that our firm has valid registration to participate in this procurement."		

II. **<u>Bidder to note that Deviations shall not be permitted for the below mentioned terms and are deemed to be complied. In case of non-compliance/deviation, offer shall be liable for rejection:</u>**

(1) **Submission of documents post PO viz., drawings /data sheet etc. as indicated in Cl: 04 of GCC:** Within **01** week from the date of receipt of Purchase Order. Delay in submission of complete set of specified documents in NIT, will attract Penalty as per GCC Clause no.:04.a.
In case of any corrections in documents to be incorporated by seller for approval of document based on end-user/consultant/buyer comments, revised documents have to be submitted incorporating all corrections within 07 days. Seller shall be required to commence manufacturing only after receipt of approved documents.

(2) **Validity:** The offer will be valid for a period of **60** days from the date of part-I bid opening and in case of Negotiation/ Counter-offer/RA, price validity will apply afresh for a period of **30** days from the date of according final price by bidder (or) up to original validity period, whichever is later.

(3) **Warranty period: 24** months from date of receipt of goods at site **or 18** months from date of commissioning, whichever is earlier. The seller should guarantee the rectification of goods in case of any break down during the Warranty period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. However, for any repaired/replaced goods during the defect liability period; the warranty shall be extended till 12 months only for that repaired/ replaced goods portion.

(4) ~~**Performance Bank Guarantee (PBG):** PBG will be applicable for a period of **36** months from the date of dispatch of goods + claim period of 03 months, for a value equal to 10% of the basic value of purchase order. It shall however be noted that PBG is not applicable against supply of Mandatory Spares.~~

~~Refer Clause "H" of Instructions to Bidders. Also note that PBG should be in the format specified in Annexure VII of ITB and no deviation to this format will be allowed.~~

~~Note: In case PBG is not furnished, the 10% basic amount will be withheld from the supply invoice. This withheld amount will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.~~

(5) **Despatch Documents:** Complete set of despatch documents (original + 1 photocopy set) as per Purchase Order shall be forwarded to Purchase Executive/BHEL directly. Depending upon the project/customer demands, Despatch documents may include one (or) more documents from the following:

Invoice (01 original and 01 copy with original sign & seal / digitally signed invoice), Lorry Receipt (L/R), Packing List, NIL Short-Shipment Certificate, insurance intimation letter, E-way bill, ~~original Performance Bank Guarantee (directly from issuing bank to BHEL),~~ ~~Country of Origin certificate~~ and original POD (Proof of Delivery) on L/R.

The precise list of despatch documents needed for the project will be specified in the Purchase Order.

One set of Invoice, Packing List, E-way bill (Part-A & B), Lorry Receipt ~~(or) AWB/BOL~~ shall be e-mailed immediately to BHEL-EDN at the time of despatch.

Note: Detailed Packing List should indicate package-wise content details and also Net & Gross weight of each package. **Tag numbers along with model numbers to be mentioned in the stickers being provided on each transmitter box, as well as on the packing list.**

(6) **Freight Charges (for indigenous scope of supply):** Freight charges shall be to vendor's account. Bidder to quote reasonable Freight charges along with applicable tax, in price bid.

(7) **Evaluation criteria to determine L1 bidder**:

(a) Project wise evaluation of tendered item.

(or)

(b) ~~Items will not be split on item-wise lowest offer. Evaluation of the lowest bidder will be done as a combined package basis.~~

Note:

a. Purchase preference to 'Micro and Small Enterprises' will get precedence over preference to 'Make in India' products.

b. Non-local offers with local content <20% i.e. other than Class-I offer & Class-II offer are also acceptable for this RFQ. However, purchase preference will be provided to Class-I offer only based on Government guidelines'

Hence, please submit your offer with relevant documents if MII/MSE purchase preference is applicable and needs to be claimed.

1) Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012

dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry.
If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product.
If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 100% of total value.

2) <u>Preference to Make in India products</u>: Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products.

The 'Class-I local supplier'/'Class-II local supplier' shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/'Class-II local

{'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under Public procurement order no. P-45021/2/2017-PP (BE-II) dt: 16.09.2020.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under Public procurement order no. P-45021/2/2017-PP (BE-II) dt: 16.09.2020.

In the event of any Nodal Ministry prescribing higher or lower margin of purchase preference and/or higher or lower percentage of local content in respect of this procurement, same shall be applicable}.'

The minimum local content to qualify as a Class 1 local supplier is denoted above. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted.

Default margin of purchase preference shall be 20% to local suppliers with default minimum local content of 50%.

(8) ~~**Erection and Commissioning charges:** *(strike off, if not applicable)*~~
~~In case the quoted total E&C value is less than ___% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price and apportioning towards E&C charges.~~
~~Refer Sl. no. 'g' under Clause 'F' of Instructions to Bidders for Payment terms of E&C charges.~~

(9) ~~**Erection Supervision and Commissioning charges:** *(strike off, if not applicable)*~~
~~In case the quoted total Erection Supervision & Commissioning value is less than **5%** of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price and apportioning towards Erection Supervision & Commissioning charges.~~

Refer Sl. no. 'h' under Clause 'F' of Instructions to Bidders for Payment terms of Erection Supervision & Commissioning charges.

(10) ~~**Comprehensive Annual Maintenance Contract:** *(strike off, if not applicable)*~~

~~CAMC will be applicable for a period of __ years from the date of expiry of warranty period (or) from the date of completion of commissioning of equipment, whichever is later.~~

~~In case the quoted total CAMC value is less than __% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price and apportioning towards CAMC charges. It shall also be noted that year-wise quote/ charges for CAMC should be either uniform (or) in increasing trend.~~

~~Refer Sl. no. 'i' under Clause 'F' of Instructions to Bidders for Payment terms of CAMC~~

(11) **Integrity Pact:** *(strike off, if not applicable)*

Execution of Integrity Pact is applicable for this tender (Refer clause "K" of Instructions to Bidders). The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory who signs in the offer) along with techno-commercial bid (Part-I, in case of two/three part bid). Only those Bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.

(12) Prospective bidders, participating for this tender have to submit attached "**Sub vendor questionnaire**" form duly filled and signed with necessary documents to take up with M/s. NTPC for vendor approval. Offer acceptance of such bidders is subject to final approval from M/s. NTPC.

(13)Ordering & Delivery:

1. Separate purchase orders will be placed for Main Equipment and Spares.
2. Separate LR for Mandatory spares is required.

Project specific Conditions for Patratu project only:

Packing Standard

1. For non-hazardous items, wooden packing shall be strong and efficient enough to ensure safe preservation without moisture ingress upto the final point of destination.
2. For hazardous/dangerous items, packing as specified in the applicable international regulations/standards.
3. Unit 1, 2 and 3 materials should be packed separately. Common consumables, if any for Unit 1, 2 and 3 should also be packed separately.
4. Spares should be packaged separately.
5. Labels should be put on the packages to identify unit wise materials.
6. One copy of packing list should be kept inside the boxes and one copy should be pasted outside the boxes.

O&M Manual (No. of Sets)

a) 2 soft copies (CDs) created in generally accepted standard computer programs (e.g. Microsoft office, AutoCad etc.)

b) 5 hard copies (Hard board plastic folders)

Dispatch Documents

1. Vendors should submit the original LR to BHEL within a week after dispatch without fail. Delay in this regard will not be acceptable.
2. Detailed packing list should be submitted to BHEL after dispatch without fail. Net weight and Gross weight should be mentioned in dispatch documents.

(14) 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 authorise 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."*

(15) The bidder declares that they will not enter into any illegal or undisclosed agreement of understanding, whether formal or informal with other bidder(s). This applies in particular to prices, specifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(16) It is the obligation on the part of supplier to discharge his liability by payment of GST to Government of India in cash (or) utilization of input Tax credit in respect of such supply or services through GST invoice under this contract, so that BHEL will avail input tax credit on such supply. In the event that the input tax credit of the GST charged by the supplier is denied by the tax authorities to BHEL due to reasons attributable to supplier, BHEL shall be entitled to recover such amount from the supplier by way of adjustment from the next invoice. In addition to the amount of GST, BHEL shall also be entitled to recover interest and penalty, in case same is imposed by the tax authorities on BHEL.

If BHEL is not able to avail the credit of CGST & SGST/IGST, partially or entirely because the supplier issued a defective invoice or failed to produce the requisite documents, then the supplier shall immediately indemnify BHEL for such loss of tax credit which would be otherwise available to BHEL. BHEL, in such case, may, at its sole discretion, decide to recover such loss by way of deduction from payment due to the supplier.

The classification of goods as per GST should be correctly done by the supplier to ensure that ITC benefit is not lost to the BHEL on account of any error on the part of the supplier.

Any statutory increase in taxes and duties (i.e. GST) or introduction of new taxes and duties within the Contractual Delivery Period shall be to BHEL's account and shall be reimbursed against documentary evidence.

Any variation in CGST & SGST / IGST at the time of supplies for any reason other than statutory, including variations due to turnover, shall be borne by supplier.

In case GST or any taxes or duties is not applicable at present but become applicable at the time of contractual delivery period due to any reason other than statutory, the same shall be borne by supplier.

(17) PERFORMANCE SECURITY

To ensure due performance of the contract, Performance Bank Guarantee (PBG) or Security Deposit (SD), hereafter referred as performance security is to be submitted by the successful bidder who is awarded the contract.

17.1 The total amount of Performance Security should not be less than five percent (5%) of the contract value.

17.2 Modes of deposit:

a) Performance security may be furnished in the following forms:

(i) Local cheques of Scheduled Banks (subject to realization)/ Pay Order/ Demand Draft/ Electronic Fund Transfer in favour of BHEL.

(ii) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.

(iii) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act (FDR should be in the name of the Contractor, a/c BHEL).
(iv) Securities available from Indian Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL).
(v) Insurance Surety Bond.
(Note: BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith)
17.3 Performance Security is to be furnished by a specified date (generally 14 (fourteen) days after notification of the award) and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations.
17.4 Forfeiture of Performance Security:
The performance security will be forfeited and credited to BHEL's account in the event of a breach of contract by the supplier.
Performance Security shall be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the warranty under the contract.
17.5 The Performance Security shall not carry any interest.

18) There may be more than 25% quantity variation in model or total quantity.

19) Bidder on whom Risk & Cost procedure has been initiated for the tendered scope is not eligible to quote in this tender.

With this, we hereby confirm that all the terms & conditions as indicated in Instructions to Bidders (Document Ref: CE: PR: 001- Rev 04) & General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 03) are accepted without any deviation.

Vendor’s Signature with Seal

Note: The above filled-in document shall be furnished as a part of Techno-commercial bid (i.e. Part-I Bid).

(1) Changes, if any, in technical specification/ Scope etc. shall be informed to participating bidders only.
(2) Any technical or commercial clarification for this tender shall be raised within **5 days** of floating tender.

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division
PB 2606 , Mysore Road Bangalore , 560026 INDIA

CE:PR:001- Rev 04

INSTRUCTIONS TO BIDDERS

Bidder is requested to read the instructions carefully and submit their quotation taking into consideration of all the points:

A. GENERAL INSTRUCTIONS:

1. Any Purchase Order resulting from this enquiry shall be governed by the Instructions to Bidders (document reference: CE: PR: 001 – Rev 04), General Conditions of Contract (document reference: CE: PR: 002 - Rev 02) and Special Conditions of Contract, if any, of the enquiry. If any term mentioned in Special Conditions of Contract (SCC) contradicts relevant clause in either Instructions to Bidders (ITB) or General Conditions of Contract (GCC), the term mentioned in SCC will supersede the corresponding term in ITB / GCC.
2. Any deviations from or additions to the “General Conditions of Contract” or “Special Conditions of Contract” require BHEL’s express written consent. The general terms of business or sale of the bidder shall not apply to this tender.
3. Regret letter (either through post or by mail or by EPS) indicating reasons for not quoting must be submitted without fail, in case of non-participation in this tender.

   Supplier shall be liable for removal as a registered vendor of BHEL when the supplier fails to quote against four consecutive tender enquiries for the same item or all enquiries in last two years for the same item, whichever is earlier.
4. Procurement directly from the manufacturers is preferred. However, if the OEM/ Principal insist on engaging the services of an agent, such agent shall not 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. Agent/Representative authorized by the OEM/Principal in turn cannot further sub authorize any other firm for submitting the offer or for placement of order.

   In case bids are received from the manufacturer/ supplier and his agent, bid received from the agent shall be ignored.
5. Consultant / firm (and any of its affiliates) shall not be eligible to participate in the tender/s for the related goods for the same project if they were engaged for consultancy services for the same project.
6. If an Indian representative/associate/liaison office quotes on behalf of a foreign based bidder, such representative shall furnish the following documents:
   a. Authorization letter to quote and negotiate on behalf of such foreign-based bidder.

   b. Undertaking from such foreign based bidder that such contract will be honored and executed according to agreed scope of supply and commercial terms and conditions.

c. Undertaking shall be furnished by the Indian representative stating that the co-ordination and smooth execution of the contract and settlement of shortages/damages/replacement/repair of imported scope till the equipment is commissioned and handed over to customer will be the sole responsibility of the Indian representative/associates/agent/liaison office.

d. Refer **Annexure I** on “Guidelines for Indian Agents”.

7. In case of imported scope of supply, customs clearance & customs duty payment will be to BHEL account after the consignment is received at Indian Airport /Seaport. Bidders must provide all original documents required for completing the customs clearance along with the shipment.

   Warehousing charges due to incomplete or missing documentation will be to supplier’s account. All offers for imported scope of supply by air, must be made from any of the gateway ports (within the country) indicated **(Refer Annexure II).**

8. The offers of the bidders who are on the banned list and also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of the banned firms is available on BHEL website: http://www.bhel.com/list-debarred-firms

9. Business dealings with bidders will be suspended if they are found to have indulged in any malpractices/misconduct which are contrary to business ethics like bribery, corruption, fraud, pilferage, cartel formation, submission of fake/false/forged documents, certificates, information to BHEL or if they tamper with tendering procedure affecting the ordering process or fail to execute a contract, or rejection of 3 consecutive supplies or if their firms / works are under strike/lockout for a long period. Bidder may refer “Guidelines for Suspension of Business Dealings with Suppliers/ Contractors” available on www.bhel.com for more details.

   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.

10. The bidder along with its associate/collaborators/sub-contractors/sub-vendors/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 your notice.

11. Offer is to be submitted in English language only.

12. For this procurement, the local content to categorize a supplier as a Class-I local supplier/ Class-II local supplier/ Non-local supplier and purchase preference to Class-I local supplier, is as defined in Public procurement (Preference to Make in India), Order 2017 dated 16.09.2020 issued by DPIIT.

    In case of subsequent Orders issued by the Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of price bids against this NIT. Default margin of purchase preference shall be 20% for Class-I local supplier only.

13. The Bidder shall mandatorily submit Declaration as mentioned under Rule 144(xi) of General Financial Rules, 2017 amendment dt 23.07.2020 issued by Ministry of Finance, Govt. of India. Where applicable, evidence of valid registration by the Competent Authority shall be attached.

The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). Refer Annexure-X for 'Restrictions under Rule 144(Xi) of General Financial Rules,2017 amendment dt: 23.07.2020'.

B. <u>GUIDELINES FOR PREPARATION OF OFFER:</u>

1. Quotation shall be submitted in Single Part Bid, Two Part Bid or Three Part Bid, as called for in the tender:

   - **SINGLE PART BID**: Technical and Commercial Bid with prices along with price summary & filled in BHEL Standard Commercial terms and conditions in a single sealed envelope.

   - **TWO PART BID**: Unpriced offer i.e. "Techno-commercial Bid" with filled in BHEL Standard Commercial terms and conditions in a sealed envelope **along with the copy of the "Price Bid" without the prices** should be enclosed in one cover and the cover must be super scribed **"Techno-commercial offer)** and Priced offer i.e. "Price Bid "containing price summary in a separate sealed envelope and must be super scribed **"Price Bid"**.

     Both these envelopes shall be enclosed in a single sealed envelope superscribed with enquiry number, due date of tender and any other details as called for in the tender document.

   - **THREE PART BID**: Pre-qualification Bid (Part-I), Techno Commercial Bid with filled in BHEL Standard Commercial terms and conditions (Part-II), and Price Bid (Part-III). All three envelopes shall be enclosed in a single sealed envelope superscribed with enquiry number, due date of tender and any other details as called for in the tender document.

   If any of the offers (Part I, Part II or Part III) are not submitted before the due date and time of submission (or) if any part of the offer is incomplete, the entire offer of the bidder is liable for rejection.

2. Supplier shall ensure to superscribe each envelope with RFQ number, RFQ Date, RFQ Due date and time, Item Description and Project clearly & boldly. Also mention on the envelope whether it is "Techno Commercial Bid" or "Price Bid" or "Pre-Qualification Bid".

   Please ensure complete address, department name and purchase executive name is mentioned on the envelope (before dropping in the tender box or handing over) so that the tender is available in time for bid opening.

3. BHEL standard Commercial Terms and Conditions (duly filled, signed & stamped) must accompany Technical-Commercial offer without fail and should be submitted in original only.

   The above indicated submission of Offers in "sealed envelope/hard copy" as mentioned in points B.1-B.3 is applicable for tenders that are not floated through E-Procurement System (EPS).

4. Validity: Unless otherwise specified in SCC (special commercial conditions of contract), the offer will be valid for a period of 90 days from the date of part-I bid opening and in case of Negotiation/Counter-offer/Reverse Auction, price validity will apply afresh for a period of 60 days from the date of according final price by bidder (or) up to original validity period, whichever is later.

5. Any of the terms and conditions not acceptable to supplier, shall be explicitly mentioned in the Techno-Commercial Bid.

   If no deviations are brought out in the offer it will be treated as if all terms and conditions of this enquiry are accepted by the supplier without deviation.

6. Deviation to this specification/item description, if any, shall be brought out clearly indicating "DEVIATION TO BHEL SPECIFICATION" without fail, as a part of Techno-Commercial Bid.

   If no deviations are brought out in the offer it will be treated as if the entire specification of this enquiry is accepted without deviation.

7. Suppliers shall submit one set of original catalogue, datasheets, bill of materials, dimensional drawings, mounting details and/or any other relevant documents called in purchase specification as part of Technical Bid.

8. "Price Bid" shall be complete in all respects containing price break-up of all components along with all applicable taxes and duties, freight charges (if applicable) etc. Once submitted no modification / addition / deletion will be allowed in the "Price Bid." Bidders are advised to thoroughly check the unit price, total price to avoid any discrepancy.

9. In addition, bidder shall also quote for erection & commissioning charges/erection supervision & commissioning charges (E&C service charges), documentation charges, testing Charges (type & routine), training charges etc. if & as applicable along with corresponding tax. The price summary must indicate all the elements clearly.

10. Wherever applicable, bidders should indicate "lumpsum" Erection and Commissioning (or) Erection Supervision and Commissioning charges, as applicable (including To & Fro Fare, Boarding, Lodging, Local Conveyance etc.) for carrying out E&C activity and further handing over to customer.

    The quotation shall clearly indicate scope of work, likely duration of commissioning, pre-commissioning checklist (if any).

11. Wherever bidders require PAC (Project Authority Certificate)/applicable certificates for import of raw materials, components required for DECC, EPCG Power Projects, Export Projects or other similar projects wherein supplies are eligible for customs duty benefits, lists and quantities of such items and their values (CIF) has to be mentioned in the offer. Prices must be quoted taking into account of such benefits.

12. Prices should be indicated in both figures & words**.** Bid should be free from correction/overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.

    Any typographical error, totalling mistakes, currency mistake, multiplication mistake, summing mistakes etc. observed in the price bids will be evaluated as per **Annexure III** "Guidelines for dealing with Discrepancy in Words & Figures – quoted in price bid" and BHEL decision will be final.

13. Documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder. However, this requirement is not mandatory for offers uploaded through E-Procurement System (EPS).

C. GUIDELINES FOR OFFER SUBMISSION:

The under-mentioned clauses 1, 2&3 will not be applicable for EPS tenders.

1. Offers / Quotations must be dropped in tender box before 13.00 Hrs. on or before due date mentioned in RFQ. The offers are to be dropped in the proper slot of the Tender Box kept in our reception area with caption "CE, SC&PV, DEFENCE".

   Tenders are opened on 3 days in a week (Monday/Wednesday/Friday). Tender must be deposited in the slot corresponding to the day (Monday - Box no.4/Wednesday - Box no. 6 /Friday - Box no.8) while depositing the offer.

2. E-Mail/ Internet/EDI offers received in time shall be considered only when such offers are complete in all respects. In case of offers received through E-mail, please send the offer to the email ID specified in the SCC document of the tender.

3. Offers of Vendors who already have a valid Technical/Commercial MOU with BHEL-EDN for the items of the RFQ shall mention the relevant MOU reference no. and give only such other details not covered in the MOU.

4. In cases where tender documents are bulky, or due to some reasons tender documents are required to be submitted by hand or through posts/couriers, the offers are to be handed over either of the two purchase officers whose names are mentioned in the SCC document of tender RFQ.
5. Tenders will be opened on due date, time and venue as indicated in the RFQ in the presence of bidders at the venue indicated in the RFQ. For EPS tenders, e-mail notifications will be automatically generated and forwarded to registered e-mail ID/s of bidders during opening of tenders.
6. Bidder will be solely responsible:
    a. For submission of offers before due date and time. Offers submitted after due date and time will be treated as "Late offers" and will be rejected.

    b. For submission of offers in the correct compartment of the tender box based on the day of due date (Monday/Wednesday/Friday). Please check before dropping your offer in the correct tender box.

    c. For depositing offers in proper sealed condition in the tender box. If the bidder drops the tender in the wrong tender box (or) if the tender document is handed over to the wrong person, BHEL will not be responsible for any such delays.

    d. For offers received through email etc., suppliers are fully responsible for lack of secrecy on information and ensuring timely receipt of such offers in the tender box before due date & time (This clause will not be applicable for EPS tenders).

    The above indicated submission of Offers as mentioned in points 6.a-6.d is applicable for tenders that are not floated through EPS.

    e. In case of e-tender, all required documents should be uploaded before due date and time. Availability of power, internet connections, system/software requirements etc. will be the sole responsibility of the bidder.

       Wherever assistance is needed for submission of e-tenders, help-line numbers as available in the web-site of service provider of BHEL may be contacted.

       Purchase Executive/ BHEL shall not be responsible for any of the activities relating to submission of offer.

D. PROCESSING OF OFFERS RECEIVED:

1. Any discount/ revised offer submitted by the supplier on its own shall be accepted provided it is received on or before the due date and time of offer submission (i.e. Part-I bid).

   The discount shall be applied on pro-rata basis to all items unless specified otherwise by the bidder.
2. Changes in offers or Revised offers given after Part-I bid opening shall not be considered as a part of the original offer unless such changes/revisions are requested by BHEL.

In case of withdrawal of any Technical/Commercial deviation(s) by the bidder before opening of price bids/conducting the Reverse Auction, revision of price/impact bid will not be accepted.

3. In case there is no change in the technical scope and/ or specifications and/ or commercial terms & conditions, the supplier will not be allowed to change any of their bids after Technical bids are opened (after the due date and time of tender opening).
4. In case of changes in scope and/ or technical specifications and/ or commercial terms & conditions by BHEL and it accounts for price implications from bidders, all techno-commercially acceptable bidders shall be asked by BHEL (after freezing the scope, technical specifications and commercial terms & conditions) to submit the impact of such changes on their price bid.

   Impact price will be applicable only for changes in technical specification / commercial conditions by BHEL. The impact price must be submitted on or before the cut-off date specified by BHEL and the original price bid and the price impact bid will be opened together at the time of price bid opening.
5. Un-opened bids (including price bids) will be returned to the respective bidders after release of Purchase order.

   Regarding Offers for EPS tenders that get rejected on PQC/ techno-commercial grounds, the bids for the subsequent parts will not be opened i.e., both technical bid and price bid (Parts-II & III) will not be opened in case of rejection on PQC ground and price bid (Part-II/Part-III, as applicable) will not be opened in case of rejection on techno-commercial ground.
6. After receipt of Purchase Order, supplier should submit required documents viz., specified drawings, bill of materials, datasheets, catalogues, quality plan, test procedure, type test report, O & M Manuals and/or any other relevant documents as per Specification/Purchase Order, as and when required by BHEL/Customer.
7. Any deviation to the terms and conditions not mentioned in the quotation by supplier in response to this enquiry will not be considered, if put forth subsequently or after issue of Purchase Order, unless clarification is sought for by BHEL and agreed upon in the Purchase Order.
8. Evaluation shall be on the basis of delivered cost (i.e. “Total Cost to BHEL").

   “Total Cost to BHEL” shall include total basic cost, packing & forwarding charges, taxes and/or duties (as applicable), freight charges, taxes on Services, customs clearance charges for imported items, any other cost indicated by bidder for execution of the contract and loading factors (for non-compliance to BHEL Standard Commercial Terms & Conditions).

   Benefits arising out of Nil Import Duty on DEEC, EPCG, DFIA Projects, Physical Exports or such 100% exemptions (statutory benefits), project imports, customer reimbursements of statutory duties (like Basic Customs Duty and cess on customs duty), Input tax credits as applicable will also be taken into account for arriving at the Total cost to BHEL (wherever applicable and as indicated in SCC document of tender).

   For EPS tenders, it shall be noted that the prices (including discounts) vis-a-vis currency quoted in EPS portal only will be considered as Final for the purpose of evaluation of the lowest bidder.

   Bidder shall ensure to indicate the applicable taxes against each line item in online portal, failing to which the same will be considered as inclusive/NIL.

   In the course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders.

   Incase more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s).

Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

9. The evaluation currency for this tender shall be INR. For evaluation of offers in foreign currency, the exchange rate (TT selling rate of SBI) shall be taken as under:

   Single part bids: Date of tender opening

   Two/three part bids: Date of Part-I bid opening

   Reverse Auction: Date of Part-I bid opening

   In case of Performance Bank Guarantee (PBG) also, exchange rate will be considered as mentioned above for converting foreign currency to Indian currency and vice versa.

   If the relevant day happens to be a bank holiday, then the exchange rate as on the previous working day of the bank (SBI) shall be taken.

10. Ranking (L-1, L-2 etc.) shall be done only for the techno-commercially acceptable offers.
11. GeM Seller ID shall be mandatory before placement of order/award of contract for goods and services to the successful bidder(s), for orders exceeding Rs.25 lakhs (including all taxes etc.). Department of Expenditure (DoE) OM no.6/9/2020-PPD dated: 24.08.2020 may be referred in this regard.

E. INFORMATION ON PAYMENT TERMS:

1. All payments will be through Electronic Fund transfer (EFT). Vendor has to furnish necessary details as per BHEL standard format **(Refer Annexure IV)** for receiving all payments through NEFT. (Applicable for Indian vendors only).
2. In case of High Sea Sales transaction, customs clearance of the consignment landed on Indian Sea/Air ports will be done by BHEL based on the original HSS documents provided by vendors.

   All warehousing charges due to delay in submission of complete and or correct HSS documents to BHEL will be to supplier's account only. Such recovery will be made out of any of the available bills **(Refer Annexure V)**.
3. Statutory deductions, if any, will be made and the deduction certificate shall be issued.
   A. In case vendor does not provide PAN details, the TDS deduction shall be at the maximum percentage stipulated as per the provisions of Income Tax Act.

      In addition to the above, Foreign vendors shall also submit relevant details of their bankers like Swift Code, Banker's Name &Address etc.
   B. TDS deduction as per section 51 of CGST Act,2017 shall be applicable as per Gazette Notification No. 50/2018-Central Tax, Dated: 13th September 2018 and subsequent notification/s, as and when released by Govt. authorities.

4. Procurement of Goods/ Works/ Services/ Consultancy Services [under clause relating to "Income Tax and Corporate Tax" or "TDS"]

a) Provision w.r.t. TDS on Purchase of Goods under section 194Q of Income Tax Act applicable from 01.07.2021 is as under:

i. TDS as applicable will be deducted by BHEL under section 194Q of the Income Tax Act, 1961 on Purchases exceeds, the amount of Rupees. 50 Lakhs or limit defined therein from time to time during the financial year under the Indian Income Tax act 1961.

ii. Since BHEL is liable to deduct Income Tax TDS under section 194Q, the provision of TCS as per section 206C(1H) of the Income Tax Act, 1961 shall not be applicable.

b) Higher rate of TDS for non-filers of ITR as per Section 206AB of Income Tax Act, 1961, in case of any vendor who does not filed their Income Tax Return for both of the two previous years preceding to current year and aggregate amount of TDS is more than or equal to Rs. 50,000/- in each of those previous two years (or limit defined by Govt. from time to time), then TDS will be deducted at the higher of following rates:

(i) Twice the rate mentioned in relevant TDS section.

(ii) Twice the rate or rates in force

(iii) 5%.

5. Incomplete documentation will not be accepted. Delayed submission of invoice / documents may result in corresponding delay in payment. In this connection, request to also refer clause: G about invoicing & payment formalities under GST regime.

   Applicable documents shall be submitted to the purchaser at the time of execution of supplies/services for availing GST input credits.

6. Bank charges of Seller's bank shall be to Seller's account and bank charges of Owner's bank other than Bill collection charges shall be to Owner's account. Bill Collection charges will be borne by Seller.

F. STANDARD PAYMENT TERMS OF BHEL-EDN:

PURCHASE ORDERS FOR:	SUPPLY WITH SERVICE(S)	SUPPLY ONLY
INDIGENOUS PROCUREMENT	a. 100% of basic value with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later. Note: In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	b. 100% of PO value with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later.

IMPORT PROCUREMENT	c. 100% of basic value will be paid against usance draft of 45 days from the date of AWB/BOL on submission of complete set of documents. Note: In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	d. 100% of PO value will be paid against usance draft of 45 days from the date of AWB/BOL on submission of complete set of documents.
HIGH-SEA SALES PROCUREMENT	e. 100% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later Note: In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	f. 100% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later.

g. Erection and Commissioning:

Evaluation methodology: Unless and otherwise specified in SCC, E&C charges should not be less than 10% of the main supply value. In case the quoted total E&C value is less than 10% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price proportionally from all items and apportioning towards E&C charges.

Payment term: 100% E&C charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C.

h. Erection Supervision and Commissioning:

Evaluation methodology: Unless and otherwise specified in SCC, E&C charges should not be less than 5% of the main supply value. In case the quoted total E&C value is less than 5% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price proportionally from all items and apportioning towards E&C charges.

Payment term: 100% E&C charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C.

i. Comprehensive Annual Maintenance Contract:

Evaluation methodology: Unless and otherwise specified in SCC, CAMC will be applicable for a period of 04 years from the date of expiry of warranty period (or) from the date of completion of commissioning of equipment, whichever is later and the total CAMC value should not be less than 20% of the main supply value. In case the quoted total CAMC value is less than 20% of the main supply value, BHEL shall evaluate Bidders

Price deducting differential amount from main supply price proportionally from all items and apportioning towards CAMC charges.

Payment terms: 100% CAMC charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of CAMC on yearly basis.

j. Terms of Payment for Training: 100% payment will be made in 45 days from the date of completion of Training or 15 days from the date of submission of complete set of invoice along with documentary evidence, whichever is later.

LOADING FACTORS FOR DEVIATION IN PAYMENT TERMS (APPLICABLE FOR IMPORT PROCUREMENT ONLY):

1) For offers received with Sight draft payment term in place of Usance draft, loading applicable will be 1.0% of basic value.

2) For offers received with Letter of Credit payment term with Usance of 45 days, loading applicable will be 2.5% of basic value.
Additional loading of 2% will be applicable for payment term as Letter of Credit at Sight.

k. Any payment term with credit period of less than 45 days for indigenous supply/HSS and any other variation of payment terms are liable for rejection.

l. Standard payment terms indicated in Clauses: F (a), (b), (c), (d), (e), (f), (g), (h), (i) & (j) will not attract any loading.

Note 1: Basic value of Purchase Order mentioned above will include all components of the purchase order and will exclude only taxes, duties, freight, training charges, E&C and AMC charges (wherever applicable). Wherever the Purchase Order is split into import portion and indigenous portion of supply, minimum % to be quoted for Services, wherever mentioned, will be of both purchase order values put together.

Note 2: In case of multiple packages/units in a power plant, payment of E&C charges will be processed on pro-rata basis.

Note 3: No deviation will be permitted from the duration of Guarantee/Warranty and/or Comprehensive Annual Maintenance Contract period specified in SCC.

Note 4: Indigenous bidder may opt to quote with payment through Letter of Credit with usance period of 120 days. Bank charges of seller's bank shall be to seller's account and bank charges of BHEL's bank other than bill collection charges shall be to BHEL's account. Bill collection charges will be borne by seller.

G. Terms & Conditions to be complied under GST regime:

1. All invoices to contain BHEL-EDN (buyer) GSTIN number: 29AAACB4146P1ZB. However for CGST +SGST/UGST billing outside the state of Karnataka, invoice has to be generated with BHEL's Nodal Agency GSTIN number. Address of Nodal Agency along with GSTIN number will be provided by BHEL at the time of issuing dispatch clearance.

2. The Bidder shall mention Bidder's GSTIN number in all quotations and Invoices submitted.

3. The Bidder shall also mention HSN (Harmonized System of Nomenclature) / SAC (Services Accounting Code) mandatorily in all quotations and invoices submitted.

4. Invoice submitted should be in the format as specified under GST Laws viz., all details as mentioned in Invoice Rules like 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. Invoice should be submitted in original for buyer plus duplicate for credit availment.
5. Payment of GST to Vendor will be made only if it is matching with data uploaded by the Vendor in GST portal.
6. For invoices paid on Reverse charge basis – "Tax payable on reverse charge basis" to be mentioned on the invoice.
7. 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, GST amount will be recoverable from vendor along with interest levied/ leviable on BHEL.
8. In case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law will be recoverable from vendor/contractor along with interest levied/ leviable on BHEL.
9. Vendor should intimate BHEL immediately on the same date of invoicing without any delay.
10. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the supplies, within the calendar month notified by BHEL.
11. 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.
12. As per Notification no.17/2022-Central Tax dated 01st August,2022 (applicable w.e.f. 01st day of October, 2022), the turnover for applicability of E-invoicing provisions has been reduced from 20 crore rupees to 10 crore rupees. In other words, registered person [other than a SEZ unit and those referred in Rule 54(2), 54(3), 54(4) and 54(4A) of the CGST Rules], whose aggregate turnover in any of the previous FY beginning from 2017-18 and onwards exceeds 10 crores, is required to comply with the requirement of IRN and QR code in respect of supply of goods or services or both to a registered person or for exports.

H. <u>Performance bank guarantee (PBG):</u>

Performance bank guarantee (PBG) will be applicable as called in the tender documents. Unless otherwise specified in the SCC, the PBG against performance of the contract shall be valid for a period of 18 months from the date of dispatch of goods + claim period of 03 months, for a value equal to 10 % of the basic value of the purchase order which will include all components of the purchase order and will exclude only taxes, duties, freight, training charges, E&C and AMC charges (wherever applicable).

1. The BG issued in Indian Rupees by Banks in India is to be executed on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Bank issuing the guarantee.
2. No deviation for the duration and value of PBG will be permitted.
3. PBG shall be from any of the BHEL consortium of bankers **(refer Annexure VI)**.

4. PBGs from nationalized banks are also acceptable.
5. PBG should be sent directly by the bank to the dealing executive mentioned in the purchase order located at the address mentioned in the purchase order.
6. PBG should be in the format specified **(refer Annexure VII)**. No deviation to this format will be allowed. However in case BHEL changes the PBG format, bidder shall honor the same.
7. Bank Guarantee should be enforceable in Bangalore.
8. In Case of Bank Guarantees submitted by Foreign Vendors-

   a. From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India) can be accepted subject to the condition that the Bank Guarantee should be enforceable in Bangalore.

   b. From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)

   b.1 Please note that Bank Guarantee issued by any of the Consortium Banks only will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter-Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It shall be noted that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor.

   b.2 In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at sl.no. b.1 is required to be followed.

   b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time).

9. Expired PBGs will be returned only after expiry of the claim period.
10. PBG shall not be applicable for spares.

I. PURCHASE PREFERENCE FOR MSE (MICRO AND SMALL ENTERPRISES) VENDORS:

Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods.

Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product. Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

1. If tendered quantity is Splittable: In tender, participating MSEs quoting price within price band of L1+15 percent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price 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 (to tendered quantity).

- 3% of the 25% will be earmarked for women owned MSEs.

- 25% of the 25% (i.e., 6.25% of the total enquired quantity) will be earmarked for SC/ST owned MSE firms provided conditions as mentioned in (1) & (2) are fulfilled.

- In case where no SC/ST category firms are meeting the conditions mentioned in (1) and (2) or have not participated in the tender, the 6.25% of earmarked quantity for SC/ST owned MSE firms will be distributed among the other eligible MSE vendors who have participated in the tender.

2. If tendered quantity is Non-Splittable: If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 100% of total value.

J. INTEGRITY COMMITMENT IN THE TENDER PROCESS, AND EXECUTION OF CONTRACTS:

1. Commitment by BHEL: BHEL commits to take all measures necessary to prevent corruption in connection with the Tender process and execution of the Contract. BHEL will, during the tender process, treat all bidder / suppliers in a transparent and fair manner, and with equity.

2. Commitment by Bidder(s)/ Contractor(s):

   a. The Bidder(s)/ Contractor(s) commit(s) to take all measures to prevent corruption and will not directly or indirectly try to influence any decision or benefit which he is not legally entitled to.

   b. The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding or any actions to restrict competition.

   c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant Acts. The Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain or pass on to others, any information or document provided by BHEL as part of business relationship.

   d. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to the relevant guidelines issued from time to time by Government of India/ BHEL.

   If the Bidder(s) / Contractor(s), before award or during execution of the Contract commit(s) a transgression of the above or in any other manner such as to put his reliability or credibility in question, BHEL is entitled to disqualify the Bidder(s) / Contractor (s) from the tender process or terminate the contract and/ or take suitable action as deemed fit.

K. Integrity Pact (IP):

(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner.

Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

Sl	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in

(b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid).
Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.

(c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

Note: No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc. on the tender issued.
All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided in SCC document of tender.

L. Conflict of Interest among Bidders/Agents:

"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 authorise 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."*

Annexure I

Guidelines for Indian Agents

- **Definition of Indian Agent**: An Indian Agent of foreign prinicipal is an individual, a partnership, an association of persons, a private or pubile company, that carries our specific obligation(s) towards processing of BHEL tender or finalization or execution of BHEL's contract on behalf of the foreign supplier.

In case of yes, vendor to note the following and reply accordingly:

i. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods. However, if the foreign principal desires to avail of the services of an Indian agent, then the foreign principal should ensure compliance to regulatory guidelines - which require mandatory submission of an Agency Agreement.

ii. It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of Government of India, issued from time to time.

iii. The Agency Agreement should specify the precise relationship between the foreign OEM / foreign principal and their Indian agent and their mutual interest in the business. All services to be rendered by agent/ associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier/ Indian agent. Any payment, which the agent or associate receives in India or abroad from the OEM, whether as commission or as a general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.

iv. Any agency commission to be paid by BHEL to the Indian agent shall be in Indian currency only.

v. Tax deduction at source is applicable to the agency commission paid to the Indian agent as per the prevailing rules.

vi. In the absence of any agency agreement, BHEL shall not deal with any Indian agent (authorized representatives / associate / consultant, or by whatever name called) and shall deal directly with the foreign principal only for all correspondence and business purposes.

vii. The "Guidelines for Indian Agents of Foreign Suppliers" enclosed at annexure –'A' shall apply in all such cases.

viii. The supply and execution of the Purchase Order (including indigenous supplies/ service) shall be in the scope of the OEM/ foreign principal. The OEM/ foreign principal should submit their offer inclusive of all indigenous supplies/ services and evaluation will be based on 'total cost to BHEL'. In case OEM/ foreign principal recommends placement of order(s) towards indigenous portion of supplies/ services on Indian supplier(s)/ agent on their behalf, the credentials/ capacity/ capability of the Indian supplier(s)/ agent to make the supplies/ services shall be checked by BHEL as per the extant guidelines of Supplier Evaluation, Approval & Review Procedure (SEARP), before opening of price bids. In this regard, details may be checked as per Annexure-B (copy enclosed). It will be the responsibility of the OEM/ foreign principal to get acquainted with the evaluation requirements of Indian supplier/ agent as per SEARP available on www.bhel.com.

The responsibility for successful execution of the contract (including indigenous supplies/ services) lies with the OEM/ foreign principal. All bank guarantees to this effect shall be in the scope of the OEM/ foreign principal.

---x---

Vendor's Signature with Seal

Guidelines for Indian Agents of Foreign Suppliers

1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with BHEL shall apply for registration in the registration form in line with SEARP.

1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the Principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/ remuneration/ salary/ retainership being paid by the principal to the agent before the placement of order by BHEL.

1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2.0 Disclosure of particulars of agents/ representatives in India, if any.

2.1 Tenderers of Foreign nationality shall furnish the following details in their offers:

2.1.1 The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the agents/ representatives in India if any and the extent of authorization and authority given to commit the Principals. In case the agent/ representative be a foreign Company, it shall be confirmed whether it is existing Company and details of the same shall be furnished.

2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/ representatives in India.

2.1.3 Confirmation of the Tenderer that the commission/ remuneration, if any, payable to his agents/ representatives in India, may be paid by BHEL in Indian Rupees only.

2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:

2.2.1 The Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any, indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/ representatives.

2.2.2 The amount of commission/ remuneration included in the price (s) quoted by the Tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/ remuneration, if any, reserved for the Tenderer in the quoted price(s), may be paid by BHEL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission/ remuneration, if any payable to the agents/ representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph 2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BHEL. Besides this there would be a penalty of banning business dealings with BHEL or damage or payment of a named sum.

—x—

ANNEXURE - II
LIST OF INTERNATIONAL GATEWAY AIRPORTS

For air based consignment, terms of delivery will be on FCA basis from following listed airports only. Vendors are requested to verify this list for use before submission of offer.

SCHEDULE NO	COUNTRY	CURRENCY CODE	AIRPORT
D01	UK	GBP	LONDON (HEATHROW)
D02	UK	GBP	NEW CASTLE
D03	UK	GBP	OXFORD. CHETLAM
D04	UK	GBP	BRISTOL. WELLINGBOROUGH
D05	UK	GBP	BIRMINGHAM
DO6	UK	GBP	EAST MIDLANDS
D07	UK	GBP	MANCHESTER
D08	UK	GBP	LEEDS
D09	UK	GBP	GLASGOW
D10	FRANCE	EURO	PARIS (ROISSY) & LYON
D11	SWEDEN	EURO	STOCKHOLM
D12	SWEDEN	EURO	GOTHENBERG & MALMO
D13	ITALY	EURO	ROMA, MILAN
D14	ITALY	EURO	TURIN, BOLOGNA, FLORENCE
D15	NETHERLANDS	EURO	AMSTERDAM, ROTTERDAM
D16	AUSTRIA	EURO	VIENNA, LINZ, GRAZ
D17	BELGIUM	EURO	ANTWERP, BRUSSELS
D18	DENMARK	DKK	COPENHAGEN
D19	JAPAN	JPY	TOKYO, OSAKA
D20	SINGAPORE	SGD	SINGAPORE
D21	CANADA	CAD	TORONTO
D22	CANADA	CAD	MONTREAL
D23	USA	USD	NEW YORK, BOSTON
D24	USA	USD	CHICAGO
D25	USA	USD	SAN FRANCISCO, LOS ANGELES
D26	USA	USD	ALANTA, HOUSTON
D27	GERMANY	EURO	MUNICH, KOLN, DUSSELDORF, HANNOVER, HAMBURG, STUTTGART, DAMSTADT, MANIHIEM, NURUMBERG
D28	GERMANY	EURO	FRANKFURT
D29	GERMANY	EURO	BERLIN
D30	SWITZERLAND	SFR	BASLE, ZURICH, GENEVA
D31	SPAIN	EURO	BARCELONA
D32	AUSTRALIA	AUD	SYDNEY
D33	AUSTRALIA	AUD	MELBOURNE
D34	AUSTRALIA	AUD	PERTH
D35	CZECH	EURO	PRAGUE
D36	HONG KONG	HKD	HONG KONG
D37	NEW ZELAND	NZD	AUCKLAND
D38	RUSSIA	USD	MOSCOW
D39	SOUTH KOREA	USD	KIMPO INTERNATIONAL, INCHEON
D40	FINLAND	EURO	HELSINKI
D41	ROMANIA	EURO	BUCHAREST
D42	NORWAY	EURO	OSLO
D43	IRELAND	EURO	DUBLIN
D44	ISRAEL	USD	TEL AVIV
D45	UAE	USD	DUBAI
D46	OMAN	USD	MUSCAT
D47	EGYPT	USD	CAIRO
D48	TAIWAN	USD	TAIPEI
D49	UKRAINE	USD	KIEV
D50	CHINA	USD	SHANGHAI, SHENZHEN
D51	PHILIPINES	USD	MANILA
D52	MALAYSIA	USD	KUALALUMPUR, PE NANG
D53	CYPRUS	USD	LARNACA
D54	SOUTH AFRICA	USD	JOHANNESBERG, DURBAN
D55	SLOVAKIA	EURO	BARTISLOVA
D56	SAUDI ARABIA	SAR	RIYADH
D57	TURKEY	EURO	ISTANBUL
D58	THAILAND	USD	BANGKOK
D59	BRAZIL	USD	SAO PAULO, RIO DE JANEIRO

ANNEXURE – III

DISCREPANCY IN WORDS & FIGURES – QUOTED IN PRICE BID

Following guidelines will be followed in case of discrepancy in words & figures-quoted in price bid:

(a) If, in the price structure quoted for the required goods/services/works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.

(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

(c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

(d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

ANNEXURE - IV

Electronic Funds Transfer (EFT) OR

Paylink Direct Credit Form

Please Fill up the form in **CAPITAL LETTERS** only.

TYPE OF REQUEST(Tick one): ________ CREATE ________ CHANGE

BHEL Vendor / Supplier Code:	
Company Name :	
Permanent Account Number(PAN):	
Address	

City:	PINCODE		STATE	

Contact Person(s)	
Telephone No:	
Fax No:	
e-mail id:	

1 Bank Name:		
2 Bank Address:		
3 Bank Telephone No:		
4 Bank Account No:		
5 Account Type: Savings/Cash Credit		
6 9 Digit Code Number of Bank and branch appearing on MICR cheque issued by Bank		
7 Bank IFSC Code(applicable for NEFT)		
8 Bank IFSC code(applicable for RTGS)		(Indian Financial System Code)

A I hereby certify that the particulars given above are true, correct and complete and that I, as a representative for the above named Company, hereby authorise BHEL, EDN, Bangalore to electronically deposit payments to the designated bank account.

B If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL / transfering Bank responsible.

C This authority remains in full force until BHEL, EDN,Bangalore receives written notification requesting a change or cancellation.

D I have read the contents of the covering letter and agree to discharge the responsibility expected of me as a participant under ECS / EFT.

Date:

Authorised Signatory:

Designation: Telephone No. with STD Code

Company Seal

Bank Certificate

We certify that__________________has an Account No____________________ with us and we confirm that the bank details given above are correct as per our records.

Date: (.................................)

Place: Signature

Please return completed form **along with a blank cancelled cheque or photocopy** thereof to:

Bharath Heavy Electricals Ltd,

Attn:

Electronics Division, Mysore Road,

BANGALORE - 560 026

In case of any Querry, please call concerned purchase executive.

ANNEXURE - V
PRESENT PROCEDURE FOR SALE IN TRANSIT (HIGH SEA SALES)

In case of High Sea Sales, vendor should submit following documents:

1. **ORIGINAL HIGH SEA SALES AGREEMENT**
   - Sale agreement (on Rs. 200/- non-judicial stamp paper & notarised with 2 witnesses with identity) has to be signed between BHEL and the Party importing material. The date of the sale documents should be in between the date of House Air Way Bill / Bill of Lading and before landing of the goods in Indian origin.
   - Following shall be included in the High Sea Sales Agreement: "THE BUYER ALSO UNDERTAKE DISCHARGES, THE OBLIGATION AND FULFILLMENT OF CONDITIONS, IF ANY, ATTACHED TO THE IMPORTATION, ASSESSMENT AND CLEARANCE OF THE GOODS IN TERMS CUSTOMS TARIFF ACT 1975, THE CUSTOMS ACT 1962 & RULES & REGULATIONS MADE THERE UNDER AND OTHER RELEVANT ACTS, ORDERS, NOTIFICATIONS".

2. **ORIGINAL INVOICES: INDIGENOUS RUPEE INVOICE & FOREIGN CURRENCY INVOICE**
   - Prices should be C.I.F., designated airport/seaport basis.
   - I.E.C., C.S.T., K.S.T. Nos. to be mentioned.
   - Description of item (Nomenclature), Unit & Quantity in both the Foreign Currency & the Indigenous Invoice in Rupee shall be exactly as per Purchase Order Description of item, Quantity and Unit. The Indigenous Invoice value shall be exactly as per Purchase Order value.
   - Seller should give Foreign Currency Invoice from the original consignor. The Foreign Currency Invoice value should be at least 2% (two per cent) less than the Indigenous Rupee Invoice value in equivalent foreign currency.

4. **ORIGINAL HOUSE AIR WAY BILL/ BILL OF LADING**
   - The sale agents should duly endorse House Air Way Bill (HAWB) for air shipments or original Bill of Lading (O.B.L.) for sea shipments and Foreign Currency Invoice in favour of BHEL-EDN.

5. **ORIGINAL CARGO ARRIVAL NOTICE FROM FORWARDER.**

6. **ORIGINAL DELIVERY ORDER ISSUED IN NAME OF BHEL-EDN.**

7. **ORIGINAL PACKING LIST.**

8. **A LETTER TO THE COMMISSIONER OF CUSTOMS FOR EFFECTING ABOVE SALE.**

9. **A LETTER TO THE DEPUTY ASSESSOR (OCTROI) FOR EFFECTING ABOVE SALE IN FAVOUR OF BHEL.**

REMARKS: In case vendor needs any clarifications on the above, the same may be sought in writing.

ELECTRONICS DIVISION, BANGALORE

Annexure-VI

BHEL MEMBER BANKS (LIST OF CONSORTIUM BANKS)

Bank Guarantee (BG) shall be issued from the following banks only:

Sl. No.	~~Nationalised~~ Banks	Sl. No.	~~Public Sector~~ Banks
1	~~Allahabad Bank~~	18	IDBI
2	~~Andhra Bank~~		
3	Bank of Baroda	Sl. No.	~~Foreign~~ Banks
4	Canara Bank	19	~~CITI Bank N.A~~
5	~~Corporation Bank~~	20	~~Deutsche Bank AG~~ RBL Bank Ltd
6	~~Central Bank~~	21	The Hongkong and Shanghai Banking Corporation Ltd. (HSBC)
7	Indian Bank	22	Standard Chartered Bank
8	Indian Overseas Bank	23	~~J P Morgan~~ Exim Bank
9	~~Oriental Bank of Commerce~~		
10	Punjab National Bank	Sl. No.	~~Private~~ Banks
11	~~Punjab & Sindh Bank~~	24	Axis Bank
12	State Bank of India	25	The Federal Bank Limited
13	~~Syndicate Bank~~	26	HDFC Bank Limited
14	~~UCO Bank~~	27	Kotak Mahindra Bank Ltd
15	Union Bank of India	28	ICICI Bank
16	~~United Bank of India~~	29	IndusInd Bank
17	~~Vijaya Bank~~	30	Yes Bank

Note:

- All BGs must be issued from BHEL consortium banks listed above.
- This list is subject to changes. Hence vendors are requested to check this list every time before issuing BGs.
- Bank Guarantees issued by Co-operative Banks/Financial Institutions cannot be accepted under any circumstance.

PROFORMA OF BANK GUARANTEE (in lieu of SECURITY DEPOSIT)

In consideration of Bharat Heavy Electricals Limited (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at ______________________[1] through its Unit atè è è è è è ..(name of the Unit) having agreed to exempt (Name of the Vendor / Contractor / Vendors) with its registered office at_________ [2] (hereinafter called the said ñContractorò which term includes vendors), from demand under the terms and conditions of the Contract reference No.__________________________ dated __________ [3] valued at Rsè è è è [4] (Rupees ------------------------)[4] (hereinafter called the said Contract), of Security Deposit for the due fulfilment by the said Contractor of the terms and conditions contained in the said Contract, on production of a Bank Guarantee for Rs.________________ [5] (Rupees ____ only),

we ____(indicate the name and address of the Bank) having its Head Office at ___________(address of the head Office) (hereinafter referred to as the Bank), , at the request of _____________________________ [Contractor(s)], being the Guarantor under this Guarantee, do hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer, , an amount not exceeding Rs._______________ without any demur, immediately on demand from the Employer and without any reservation, protest, and recourse and without the Employer needing to prove or demonstrate reasons for its such demand

Any such demand made on the bank, shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs._______________.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court or Tribunal or Arbitrator or any other authority, our liability under this present being absolute and unequivocal.

The payment so made by us under this guarantee shall be a valid discharge of our liability for payment hereunder and the Contractor(s) shall have no claim against us for making such payment.

We, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied & the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said contractor(s) or acceptance of the final bill or discharge of this guarantee by the Employer, whichever is earlier. This guarantee shall initially remain in force upto and including ________6 and shall be extended from time to time for such period as may be desired by the Employer. Unless a demand or claim under this guarantee is made on us in writing on or before the _________________[7], we shall be discharged from all the liability under this guarantee thereafter.

We, ____(indicate the name of the Bank)____further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

We,é é é é é é . BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

a) The liability of the Bank under this Guarantee shall not exceedé é é é é é é é é é [5]

b) This Guarantee shall be valid up to é é é é é é [6]

c) Unless the Bank is served a written claim or demand on or before _____________[7] all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We, _____________ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

Date _____________ Day of __________

for____(indicate the name of the Bank)__

(Signature of Authorised signatory)

[1] *ADDRESS OF THE EMPLOYER. I.e Bharat Heavy Electricals Limited*

[2] *ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER .*

[3] *DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE*

[4] *CONTRACT VALUE*

[5] *BG AMOUNT IN FIGURES AND WORDS*

[6] *VALIDITY DATE*

[7] *DATE OF EXPIRY OF CLAIM PERIOD*

Note:

1. Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.

2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.

3. In line with the GCC, SCC or contractual terms, Unit may carry out minor modifications in the Standard BG Formats. If required, such modifications may be carried out after taking up appropriately with the Unit/Region's Law Deptt.

4. **In Case of Bank Guarantees submitted by Foreign Vendors-**

a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.

b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**

b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

b.2 **In case, Foreign Vendors intend to provide BG from** Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at **sl.no. b.1** will required to be followed.

b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

Annexure-VIII

Annexure-VIII

Certificate by Chartered Accountant on letterhead

This is to certify that M/s ____ (hereinafter referred to as 'enterprise') having PAN Number ___________and UDYAM Registration Number ______________________, registered office at ___________ ______________________________________ is falling under the category _____________ (**Micro / Small / Medium**) under MSMED Act 2006. (Copy of UDYAM Registration Certificate to be enclosed).

The said classification of __________ (**Micro / Small / Medium**) is arrived at based on the Notifications / guidelines / clarifications issued under Micro, Small and Medium Enterprises Development Act, 2006 including the notification S.O.2119 (E) dated 26th June 2020.

The Investment of the enterprise in Plant and Machinery or Equipment as at 31st March 2020 as per Clause 4 of the Notification is ______________ (Rupees in Lakhs).

The turnover of the Enterprise for the period ending 31st March 2020 as per Clause 5 of the Notification is ____________________ (Rupees in Lakhs).

Date:

(Signature) Name-
Membership number-

Seal of Chartered Accountant with UDIN reference

ANNEXURE-IX

Integrity Pact (IP)

(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

Sl	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3.	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in

(b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.

(c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

Note:

No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc. on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

Details of contact person(s):

(1)
Name: Pooja V Rao
Dept.: CE-MM-PR
Address: BHEL-EDN, Mysuru Road, Bengaluru-560026.
Phone: 080-2699-8288, 8277361889
Email: poojavrao@bhel.in

(2)
Name: Saravana Babu A
Dept.: CE-MM-PR
Address: BHEL-EDN, Mysuru Road, Bengaluru-560026.
Phone: 080-2699-8728, 9449869725
Email: saravanababu@bhel.in

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____________________, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for ______________ DIN RAIL TEMPERATURE TRANSMITTERS FOR PATRATU, CHANDRAPUR PROJECTS ________ (hereinafter referred to as "Contract"). The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint panel of Independent External Monitor(s) (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commits himself to observe the following principles during participation in the tender process and during the contract execution.

2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. 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.

2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process , terminate the contract, if already awarded, exclude from future business dealings and/ or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - **Compensation for Damages**

4.1 If the Principal has disqualified the Bidder (s) from the tender process before award / order acceptance according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

4.2 If the Principal is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above , the Bidder(s)/ Cotractor (s) transgression through a violation of Section 2 above shall be construed breach of contract and the Principal shall be entitled to demand and recover from the Contractor an amount equal to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee , whichever is higher, as damages, in addition to and without prejudice to its right to demand and recover compensation for any other loss or damages specified elsewhere in the contract.

Section 5 - Previous Transgression

5.1 The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason or action can be taken as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 6 - Equal treatment of all Bidder (s)/ Contractor (s) / Sub-contractor (s)

6.1 The Principal will enter into Integrity Pacts with identical conditions as this Integrity Pact with all Bidders and Contractors.

6.2 In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor(s) and ensure that all Sub-contractors also sign the Integrity Pact.

6.3 The Principal will disqualify from the tender process all Bidders who do not sign this Integrity Pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

8.1 The Principal appoints competent and credible panel of Independent External Monitor (s) (IEMs) for this Integrity Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.

8.2 The IEMs are not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.

8.3 The IEMs shall be provided access to all documents/ records pertaining to the Contract, for which a complaint or issue is raised before them as and when warranted. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.

8.4 The Principal will provide to the IEMs sufficient information about all meetings among the parties related to the Contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the IEMs the option to participate in such meetings.

8.5 The advisory role of IEMs is envisaged as that of a friend, philosopher and guide. The advice of IEMs would not be legally binding and it is restricted to resolving issues raised by a Bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some Bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.

8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of Contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.

8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to the CMD, BHEL at the earliest. They may also send their report directly to the CVO, in case of suspicion of serious irregularities requiring legal/ administrative action. Only in case of very serious issue having a specific, verifiable Vigilance angle, the matter should be reported directly to the Commission. IEMs will tender their advice on the complaints within 30 days.

8.8 The CMD, BHEL shall decide the compensation to be paid to the IEMs and its terms and conditions.

8.9 IEMs should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the Prinicpal should be looked into by the CVO of the Principal.

8.10 If the IEMs have reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code / Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.11 After award of work, the IEMs shall look into any issue relating to execution of Contract, if specifically raised before them. As an illustrative example, if a Contractor who has been awarded the Contract, during the execution of Contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs. Issues like warranty/ guarantee etc. shall be outside the purview of IEMs.

8.12 However, the IEMs may suggest systemic improvements to the management of the Principal, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.

8.13 The word `Monitor' would include both singular and plural.

Section 9 - Pact Duration

9.1 This Integrity Pact shall be operative from the date this Integrity Pact is signed by both the parties till the final completion of contract for successful Bidder, and for all other Bidders 6 months after the Contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

9.2 If any claim is made/ lodged during currency of this Integrity Pact, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

10.1 This Integrity Pact is subject to Indian Laws and exclusive jurisdiction shall be of the competent Courts as indicated in the Tender or Contract, as the case may be.

10.2 Changes and supplements as well as termination notices need to be made in writing.

10.3 If the Bidder(s)/ Contractor(s) is a partnership or a consortium or a joint venture, this Integrity Pact shall be signed by all partners of the partnership or joint venture or all consortium members.

10.4 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this Integrity Pact with the Principal would be competent to participate in the bidding. In other words, entering into this Integrity Pact would be a preliminary qualification.

10.6 In the event of any dispute between the Principal and Bidder(s)/ Contractor(s) relating to the Contract, in case, both the parties are agreeable, they may try to settle dispute through Mediation before the panel of IEMs in a time bound manner. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as the terms & conditions of the Contract. The fees/expenses on dispute resolution through mediation shall be shared by both the parties. Further, the mediation proceedings shall be confidential in nature and the parties shall keep confidential all matters relating to the mediation proceedings including any settlement agreement arrived at between the parties as outcome of mediation. Any views expressed, suggestions, admissions or proposals etc. made by either party in the course of mediation shall not be relied upon or introduced as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the dispute that is the subject of mediation proceedings. Neither of the parties shall present IEMs as witness in any Alternative Dispute Resolution or judicial proceedings in respect of the dispute that was subject of mediation.

Pooja V. Rao

ಪೂಜಾ ವಿ. ರಾವ್, ಉಪ ವ್ಯವಸ್ಥಾಪಕರು/ ಸಿ ಇ.-ಎಂ.ಎಂ.-ಪಿ.ಆರ್.
पूजा वी. राव, उप प्रबंधक/सी.ई.-एम.एम.-पी.आर.
POOJA V. RAO, DY. MANAGER/CE-MM-PR
BHEL-EDN, MYSURU ROAD, BENGALURU-560026

For & On behalf of the Principal
(Office Seal)

Place BENGALURU
Date 06.12.2023

Witness:
(Name & Address)

ಎ. ಸರವಣ ಬಾಬು, ವ್ಯವಸ್ಥಾಪಕರು/ ಸಿ.ಇ.-ಎಂ.ಎಂ.-ಪಿ.ಆರ್.
ए. सरवण बाबु, प्रबंधक/सी.ई.-एम.एम.-पी.आर.
A. SARAVANA BABU, MANAGER/CE-MM-PR
BHEL-EDN, MYSURU ROAD, BENGALURU-560026

For & On behalf of the Bidder/ Contractor
(Office Seal)

Witness:
(Name & Address)

Annexure-X

Restrictions under Rule 144(xi) of General Financial Rules, 2017 amendment dt: 23.07.2020

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Order means :-

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose *beneficial owner* is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The *beneficial owner* for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

   Explanation--

   a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;

   b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

(On Company Letter Head)

FORM NO. 10F
[See sub-rule (1) of rule 21AB]
Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of the Income-tax Act, 1961

I………………. son/daughter of Mr ………………. in the capacity of………………. (Designation) do provide the following information, relevant to the previous year **2021-22** in case of ………………….. for the purposes of sub-section (5) of section 90/section 90A:-

Sl.No.	Nature of information	Details
(i)	Status (individual; company, firm etc.) of the assesse	Company
(ii)	Permanent Account Number (PAN) of the assessee if allotted	
(iii)	Nationality (in the case of an individual) or Country or specified territory of incorporation or registration (in the case of others)	……………………
(iv)	Assessee’s tax identification number in the country or specified territory of residence and if there is no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory of which the assessee claims to be a resident	……………………

(v)	Period for which the residential status as mentioned in the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A is applicable	**2021-22**
(vi)	Address of the assessee in the country or territory outside India during the period for which the certificate, mentioned in (v) above, is applicable	…………………….. ……………………. ……………………

I have obtained a certificate to in sub-section (4) of section 90 of sub-section (4) of section 90A from the Government of………………. (name of country or specified territory outside India)

Signature:……………….
Name:……………….
Address:……………….
Email ID:………………
Contact Number…………….
Permanent Account Number:……………….

Verification

I………………. do hereby declare that to the best of my knowledge and belief what is stated above is correct complete and is truly stated. Verified today the………………. day of………………..……………….

Signature of the person providing the information

Place:……………….

(On Company Letter Head)

No Business Connection or Permanent Establishment Certificate

Date

To

Bharat Heavy Electricals Limited
Electroncis Division, PB NO. 2606,
Mysore Road, Bangalore
India - 560026

Sir,

Sub: No Business Connection or Permanent Establishment declaration for FY **2021-22**

This is to certify that …………………………… (Name of the supplier) is a company incorporated in …………………(country) and does not have any business connection in India as per the provision of Section 9 of the Income Tax Act 1961 or any Permanent Establishment as defined in Article 5 of the India and ……………….(country) DTAA.

We hereby certify that we will notify BHEL in case of any change in the status as certified above.

For ………………………………

Authorised Signatory

(Note – Please refer definition of the Business Connection on reverse and Permanent Establishment in the relevant DTAA)

"Business connection" as defined in Section 9 of the Income Tax Act the shall include any business activity carried out through a person who, acting on behalf of the non-resident,—

(a) has and habitually exercises in India, an authority to conclude contracts on behalf of the non-resident or habitually concludes contracts or habitually plays the principal role leading to conclusion of contracts by that non-resident and the contracts are—

(i) in the name of the non-resident; or

(ii) for the transfer of the ownership of, or for the granting of the right to use, property owned by that non-resident or that non-resident has the right to use; or

(iii) for the provision of services by the non-resident; or

(b) has no such authority, but habitually maintains in India a stock of goods or merchandise from which he regularly delivers goods or merchandise on behalf of the non-resident; or

(c) habitually secures orders in India, mainly or wholly for the non-resident or for that non-resident and other non-residents controlling, controlled by, or subject to the same common control, as that non-resident:

Provided that such business connection shall not include any business activity carried out through a broker, general commission agent or any other agent having an independent status, if such broker, general commission agent or any other agent having an independent status is acting in the ordinary course of his business :

Provided further that where such broker, general commission agent or any other agent works mainly or wholly on behalf of a non-resident (hereafter in this proviso referred to as the principal non-resident) or on behalf of such non-resident and other non-residents which are controlled by the principal non-resident or have a controlling interest in the principal non-resident or are subject to the same common control as the principal non-resident, he shall not be deemed to be a broker, general commission agent or an agent of an independent status

For the removal of doubts, it is hereby clarified with explanation-2A, that the significant economic presence of a non-resident in India shall constitute "business connection" in India and "significant economic presence" for this purpose, shall mean—

(a) transaction in respect of any goods, services or property carried out by a non-resident in India including provision of download of data or software in India, if the aggregate of payments arising from such transaction or transactions during the previous year exceeds such amount as may be prescribed; or

(b) systematic and continuous soliciting of business activities or engaging in interaction with such number of users as may be prescribed, in India through digital means:

Provided that the transactions or activities shall constitute significant economic presence in India, whether or not,—

(i) the agreement for such transactions or activities is entered in India; or

(ii) the non-resident has a residence or place of business in India; or

(iii) the non-resident renders services in India:

Thresholds for the purposes of significant economic presence.

11UD. (1) For the purposes of clause (a) of Explanation 2A to clause (i) of sub-section (1) of section 9, the amount of aggregate of payments arising from transaction or transactions in respect of any goods, services or property carried out by a non-resident with any person in India, including provision of download of data or software in India during the previous year, shall be two crore rupees;

(2)For the purposes of clause (b) of Explanation 2A to clause (i) of sub-section (1) of section 9, the number of users with whom systematic and continuous business activities are solicited or who are engaged in interaction shall be three lakhs.

ANNEXURE CXII

BANK GUARANTEE FOR ADVANCE / Mile-stone payment

Bank Guarantee No:
Date:

To

NAME

& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

In consideration of Bharat Heavy Electricals Limited[1] (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at ______________________[1] through its Unit at......................(name of the Unit) having awarded to..........................[2] (Name of the Vendor / Contractor / Supplier), with its registered office at________[2] (hereinafter called "the Vendor/Contractor/Supplier" which expression shall include its successors and permitted assigns) a contract Ref No......................dated ....[3]valued at Rs...........(Rupees ------------------------)/FC.................(in words..........) for ....[4](hereinafter called the 'Contract')

AND WHEREAS the Employer has agreed to advance to the Vendor/Contractor/Supplier, a sum of Rs............ (Rupees...................... only), equivalent to _______% of the said value of the Contract (hereinafter called "the said Advance"), upon the condition, that the said Advance shall be secured by a guarantee for Rs/ FC ------------------- (Rupees/ FC -----------------------)[5] from a Bank as hereinafter appearing.

We, ..., (hereinafter referred to as the Bank), having registered/Head office at .... and a branch at .... being the Guarantor under this Guarantee, hereby irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer any sum or sums upto a maximum amount but not exceeding Rs/FC ------------------- (Rupees/FC -----------------------) without any demur, merely on your first demand and without any reservation, protest and recourse and without the Employer needing to prove or demonstrate reasons for its such demand.

Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _______________ ________________________.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Vendor/Contractor/Supplier in any suit or proceeding pending before any Court or Tribunal, Arbitrator or any other authority, our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment hereunder and the Vendor/Contractor/supplier shall have no claim against us for making such payment.

We, the é é é é é é é é Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We é é >>>> Bank further agree that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Vendor/Contractor/Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Vendor/Contractor/Supplier and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Vendor/Contractor/Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Vendor/Contractor/Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Vendor/Contractor/Supplier and notwithstanding any security or other guarantee that the Employer may have in relation to the Vendor/Contractor/Supplier's liabilities.

This Guarantee shall remain in force upto and includingé é é é é é é é é é .. [6] and shall be extended from time to time on the request of the Employer for such period as may be desired by the Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Vendor/Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms hereof. However, unless a demand or claim under this Guarantee is made on us in writing on or before the é é é é é é é é é é é é .[7] we shall be discharged from all liabilities under this Guarantee.

We, é é é é é é BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

a) The liability of the Bank under this Guarantee shall not exceedé é é é é é é é é é [5]
b) This Guarantee shall be valid up to é é é é é é [6]
c) Unless the Bank is served a written claim or demand on or before _____________ [7] all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank

We, _____________ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dateé é é é é é .
Place of Issueé é é é é é .

[1] *NAME AND ADDRESS OF THE EMPLOYER. i.e Bharat Heavy Electricals Limited*

[2] *NAME AND ADDRESS OF VENDOR /CONTRACTOR / SUPPLIER*

[3] *DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE*

[4] *CONTRACT VALUE AND PROJECT/SUPPLY DETAILS*

[5] *BG AMOUNT IN FIGURES AND WORDS*

[6] *VALIDITY DATE*

[7] *DATE OF EXPIRY OF CLAIM PERIOD*

Note:

1. Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.

2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.

3. In line with the GCC, SCC or contractual terms, Unit may carry out minor modifications in the Standard BG Formats. If required, such modifications may be carried out after taking up appropriately with the Unit/Region's Law Deptt.

4. In exceptional circumstances where advance payment is to be made to a vendor and the Unit has contractually agreed with the Contractor/ Vendor for periodic reduction in Advance Bank Guarantee, if required the following clause may be added in the BG Text-

   "The liability under this Guarantee shall stand reduced proportionally on periodic basis, in accordance with the value of effected shipment/dispatches/services completed on written confirmation by BHEL."

5. **In Case of Bank Guarantees submitted by Foreign Vendors-**

   a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.

   b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**

      b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter-Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter-Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.

      b.2 **In case, Foreign Vendors intend to provide BG from** Overseas Branch of our Consortium Bank (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at **sl.no. b.1** will required to be followed.

      b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division
PB 2606 , Mysore Road Bangalore , 560026 INDIA

CE: PR: 002- Rev 03

GENERAL COMMERCIAL CONDITIONS FOR CONTRACT

These 'General Commercial Conditions for Contract for Purchase' herein after referred to as GCC apply to all enquiries, tenders, requests for quotations, orders, contracts and agreements concerning the supply of goods and the rendering of related services (hereinafter referred to as "deliveries") to Bharat Heavy Electricals Limited and any of its units, regions or divisions (hereinafter referred to as "BHEL" or the Purchaser) or its projects/ customers.

Any deviations from or additions to these GCC require BHEL's express written consent. The general terms of business or sale of the vendor shall not apply to BHEL. Acceptance, receipt of shipments or services or effecting payment shall not mean that the general terms of business or sale of the vendor have been accepted.

Orders, agreements and amendments thereto shall be binding if made or confirmed by BHEL in writing. Only the Purchasing department of BHEL is authorized to issue the Purchase Order or any amendment thereof.

Definitions: Throughout these conditions and in the specifications, the following terms shall have the meanings assigned to them, unless the subject matter or the context requires otherwise.

a) 'The Purchaser' means Bharat Heavy Electricals Limited, Electronics division, Mysore road, Bangalore 560 026, a Unit 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.
b) 'The vendor' means the person, firm, company or organization on whom the Purchase Order is placed and shall be deemed to include the vendor's successors, representative heirs, executors and administrator as the case may be. It may also be referred to as Seller, Contractor or Supplier.
c) 'Contract' shall mean and include the Purchase Order incorporating various agreements, viz. tender/ RFQ, offer, letter of intent/acceptance/ award, the General Conditions of Contract and Special Conditions of Contract for Purchase, Specifications, Inspection/ Quality Plan, Schedule of Prices and Quantities, Drawings, if any enclosed or to be provided by BHEL or his authorized nominee and the samples or patterns if any to be provided under the provisions of the contract.
d) 'Parties to the Contract' shall mean the 'The Vendor' and the Purchaser as named in the main body of the Purchase Order.

Order of Precedence:

In case of any inconsistency or contradiction between any of the documents, the order of precedence shall be Purchase Order, LOI / LOA, Special Conditions of Contract and General Conditions of Contract for commercial conditions; and specific agreement on technical conditions, RFQ/offer and specification for Technical Conditions.

Interpretation:

In the contract, except where the context requires otherwise:

a) words indicating one gender include all genders;
b) words indicating the singular also include the plural and words indicating the plural also include the singular;

c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
d) "Written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

Applicable Conditions:

1. Price Basis: All prices shall be firm until the purchase order is executed / completed in all respects. No price variations / escalation shall be permitted.

2. Ordering and confirmation of Order:Vendor shall send the order acceptance on their company letter head/ through e-mail within a week from the date of receipt of Purchase Order or such other period as specified/ agreed by BHEL. BHEL reserves the right to revoke the order placed if the order confirmation differs from the original order placed. The acceptance of goods/services/supplies by BHEL 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 BHEL) from the date of receipt of the purchase order.

3. Documentation:After receipt of Purchase Order, vendor should submit necessary documents(if & as applicable) like drawings specified, bill of materials, datasheets, catalogues, quality plan, test procedure, type test report , O & M Manuals and/or any other relevant documents as per Specification/Purchase Order, as and when required by BHEL/Customer.
   At any stage within the contract period, the vendor shall notify of any error, fault or other defect found in BHEL's documents /specifications or any other items for reference. If and to the extent that (taking account of cost and time) any vendor exercising due care would have discovered the error, fault or other defect when examining the documents/specifications before submitting the tender, the time for completion shall not be extended. However if errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the vendor's documents, they shall be corrected at his cost, notwithstanding any consent or approval.

4. Penalty:
   a. For delay in documentation: In the event of delay in submission of complete set of specified documents ((like drawings, bill of materials, datasheets, catalogues, quality plan etc. as called in tender specifications including soft copies wherever applicable) in required sets beyond two(02) weeks (or as agreed/indicated in the SCC/Purchase Order) from the date of receipt of Purchase Order(by email), penalty at 0.5% (half percent) per week or part thereof, limited to a maximum of 5% (five percent) of the basic material value of the Purchase Order will be applicable.

      Penalty for delayed documentation if applicable, shall be deducted at the time of first supply payment. If penalty is applicable for duration of less than a week, penalty @ 0.5% (half percent) of the basic material value will be deducted. GST as applicable will be recovered along with penalty amount.

   b. For delay in delivery: In the event of delay in agreed contractual delivery as per Purchase Order, penalty @ 0.5 % (half percent) per week or part thereof but limited to a max of 10% (ten percent) value of undelivered portion (basic material cost) will be applicable. Delivery will commence from the date of issue of Manufacturing clearance along with approved document. The date for which Inspection call is issued by vendor along with test certificates / test reports /Certificate of Conformance / calibration reports, as proof of completion of manufacturing will be treated as date of deemed delivery for penalty calculation. In the absence of furnishing such document indicated above as proof of completion of manufacturing along with inspection call, actual date of inspection will be considered as date of deemed delivery and BHEL will not be responsible for delay in actual date of inspection.

Penalty for delayed delivery if applicable, shall be deducted at the time of first supply payment. If penalty is applicable for duration of less than a week, penalty @ 0.5% (half percent) of the basic material value will be deducted. GST as applicable will be recovered along with penalty amount.

5. <u>Contract variations (Increase or decrease in the scope of supply):</u> BHEL may vary the contracted scope as per requirements at site. If vendor is of the opinion that the variation has an effect on the agreed price or delivery period, BHEL shall be informed of this immediately in writing along with technical details. Where unit rates are available in the Contract, the same shall be the basis for such additional work. Vendor shall not perform additional work before BHEL has issued written instructions/ amendment to the Purchase Order to that effect. The work which the vendor should have or could have anticipated in terms of delivering the service(s) and functionality (i.e.) as described in this agreement, or which is considered to be the result of an attributable error on the vendor's part, shall not be considered additional work.

6. <u>Inspection:</u> Prior written notice of at least 10 days shall be given along with internal test certificates/COC and applicable test certificates. Materials will be inspected by BHEL-EDN-QS/CQS or BHEL nominated Third Party Inspection Agency (TPIA) or BHEL authorized Inspection Agency or Customer / Consultant or jointly by BHEL & Customer / consultant. All tests have to be conducted as applicable in line with approved Quality plan or QA Checklist or Purchase specification and original reports shall be furnished to BHEL-EDN, Bangalore for verification/acceptance for issue of dispatch clearance. BHEL reserves the right for conducting repeat test, if required.
   All costs related to inspections & re-inspections shall be borne by vendor. Whether the Contract provides for tests on the premises of the vendor or any of his Sub-contractor/s, vendor shall be responsible to provide such assistance, labour, materials, electricity, fuels, 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 BHEL only if specifically agreed to in the purchase order.

7. <u>Transit Insurance:</u> Transit insurance coverage between vendor's works and project site shall be to the account of BHEL, unless specifically agreed otherwise. However, vendor shall send intimation directly to insurance agency (as mentioned in dispatch instructions issued by BHEL) through fax/courier/e-mail, immediately on dispatch of goods for covering insurance. A copy of such intimation sent by vendor to insurance agency shall be given to BHEL along with dispatch documents. Dispatch documents will be treated as incomplete without such intimation copy. BHEL shall not be responsible for sending intimations to insurance agency on behalf of the vendor.

8. <u>Mode of dispatch</u>:
   Indigenous Scope: By road on Door Delivery Consignee Copy attached basis through your approved transporter (unless otherwise indicated in Dispatch Instructions), only on receipt of Despatch Clearance from BHEL.
   Imported Scope: By Air/Sea through BHEL approved Freight Forwarder/supplier approved Consolidator respectively as per agreed contractual terms, only on receipt of Dispatch Clearance from BHEL.

9. <u>Changes in Statutory levies</u>:
   If any rates of Tax are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the execution of Contract, which was or will be assessed on the bidder in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction there from, as the case may be. However, these adjustments would be restricted to direct transactions between BHEL and the bidder /agent of foreign bidder (if applicable). These adjustments shall not be applicable on procurement of raw materials, intermediary components etc. by the bidder /agent.

10. <u>Availing duty/tax exemption benefits by bidder, wherever applicable</u>: BHEL shall issue the required Certificate/s, as per relevant policies of the Govt. of India, to facilitate the bidders to avail any such benefits under the Contract. In case of failure of the bidders to receive the benefits partly or fully from the Govt. of India and/or in case of any delay in receipt of such benefits, BHEL shall neither be liable nor responsible in any manner whatsoever.

11. Taxes against sub-vendor dispatches: All taxes/levies, as applicable in respect of all components, equipments and material to be despatched directly from the sub-vendor's works to Site irrespective of the fact whether such taxes and levies are assessable and chargeable on Vendor or the BHEL, shall be to the vendor's account and no separate claim in this regard will be entertained by BHEL.

12. High Sea Sales (HSS): Customs clearance of the consignment landed on Indian Sea/Air ports will be done by BHEL based on the original HSS documents provided by vendors.
    Any delay in submission of complete/correct HSS documents to BHEL may incur demurrage charges. All demurrage charges on account of incomplete /incorrect HSS documents submission by vendor will be to vendor's account and all such charges will be recovered from any of the available vendor bills with BHEL.

13. Packaging and dispatch:The Seller shall package the goods 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 of tropical salt laden atmosphere. The packages shall be provided with fixtures/ hooks and sling marks as may be required for easy and safe handling. 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.
    The packing, shipping, storage and processing of the goods must comply with the prevailing legislation and regulations concerning safety, the environment and working conditions. *For facilitating smooth movement of shipment, the consignment has to be in stackable condition*. Any Imported/Physical Exports items packed with raw/ solid wood packing material should be treated as per ISPM – 15 (fumigation) and accompanied by Phytosanitory/ Fumigation certificate. If safety information sheets (MSDS – Material Safety Data Sheet) exist for an item or the packaging, vendor must provide this information without fail along with the consignment.
    Each package must be marked with Consignee name, Purchase order number, Package number, Gross weight and net weight, dimensions (LxBxH) and Seller's name. Packing list of goods inside each package with PO item number and quantity must also be fixed securely outside the box to indicate the contents of each box. Total number of packages in the consignment must also be indicated in the packing list.
    Separate packing & identification of items should be as follows.
    1. Main Scope - All items must be tagged with part no. & item description.
    2. Commissioning accessories/spares - All items must be tagged with part no. & item description.
    3. Mandatory spares - All items must be tagged with part no. & item description.
    Nevertheless, vendor shall adhere to dispatch & packing instructions issued by BHEL at the time of dispatch.

14. Assignment of Rights & Obligations; Subcontracting: Vendor is not permitted to subcontract the delivery or any part thereof to third party or to assign the rights and obligations resulting from this agreement in whole or in part to third parties without prior written permission from BHEL. Any permission or approval given by the BHEL shall, however, not absolve the vendor of the responsibility of his obligations under the Contract.

15. Progress report: Vendor shall render such report as to the progress of work and in such form as may be called for by the concerned purchase officer from time to time. The submission and acceptance of such reports shall not prejudice the rights of BHEL in any manner.

16. Non-disclosure and Information Obligations: Vendor shall provide with all necessary information pertaining to the goods as it could be of importance to BHEL. Vendor shall not reveal any specified confidential information that may be divulged by BHEL to Vendor's employees not involved with the tender/ contract & its execution and delivery or to third parties, unless BHEL has agreed to this in writing beforehand. Vendor shall not be entitled to use the BHEL name in advertisements and other commercial publications without prior written permission from BHEL.

17. Cancellation /Termination of contract: BHEL shall have the right to completely or partially terminate the agreement by means of written notice to that effect. Termination of the Contract, for whatever reason, shall be without prejudice to the rights of the parties accrued under the Contract up to the time of termination.

BHEL shall have the right to cancel/foreclose the Order/ Contract, wholly or in part, in case it is constrained to do so on account of any decline, diminution, curtailment or stoppage of the business.

18. Breach of Contract, Remedies & Termination :
    In case of breach of contract (failure of supplier), BHEL reserves the right to recover 10% of the contract value from financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies be pursued.

    Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc. shall be applied as per provisions of the contract.

19. Shortages: In the event of shortage on receipt of goods and/or on opening of packages at site, all such shortages, caused by supplier's act or omission, shall be made good at free of cost within a reasonable time that BHEL may allow from such intimation.

    Transit Damages: In the event of receipt of goods in damaged condition or having found them so upon opening of packages at site, supplier shall make good of all such damages within a reasonable time from such intimation by BHEL. In case BHEL raises an insurance claim, the cost of material limited to insurance settled amount less handling charges will be reimbursed to supplier.

20. Remedial work: Notwithstanding any previous test or certification, BHEL may instruct the vendor to remove and replace materials/goods or remove and re-execute works/services which are not in accordance with the purchase order. Similarly BHEL may ask the vendor to supply materials or to execute any services which are urgently required for any safety reasons, whether arising out of or because of an accident, unforeseeable event or otherwise. In such an event, Vendor shall provide such services within a reasonable time as specified by BHEL.

21. Indemnity Clause: Vendor shall comply with all applicable safety regulations and take care for the safety of all persons involved. Vendor is fully responsible for the safety of its personnel or that of his subcontractor's men / property, during execution of the Purchase Order and related services. All statutory payments including PF, ESI or other related charges have to be borne by the vendor. Vendor is fully responsible for ensuring that all legal compliances are followed in course of such employment. Vendor shall fully indemnify and keep indemnified BHEL against all claims of whatsoever nature arising during the course and out of execution of this Order/Contract.

22. Product Information, Drawings and Documents: All specified drawings, technical documents or other technical information received by Vendor from BHEL or vice versa 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 Disclosing 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 binding only to the extent that they are by reference expressly included in the contract.

    Vendor, as per agreed date/s but not later than the date of delivery, provide free of charge information and drawings which are necessary to permit and enable BHEL to erect, commission, operate and maintain the product. Such information and drawings shall be supplied in as many numbers of copies as may be agreed upon.

    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 disclosing party.

23. Intellectual Property Rights, Licenses: If any Patent, design, Trade mark or any other intellectual property rights apply to the delivery (goods/related service) or accompanying documentation shall be the exclusive

property of the Vendor and BHEL shall be entitled to the legal use thereof free of charge by means of a non-exclusive, worldwide, perpetual license. All intellectual property rights that arise during the execution of the Purchase Order/ contract for delivery by vendor and/or by its employees or third parties involved by the vendor for performance of the agreement shall belong to BHEL. Vendor shall perform everything necessary to obtain or establish the above mentioned rights. The Vendor guarantees that the delivery does not infringe on any of the intellectual property rights of third parties. The Vendor shall do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged) claims by third parties. The Vendor shall indemnify BHEL against any (alleged) claims by third parties in this regard and shall reimburse BHEL for any damages suffered as a result thereof.

24. Force Majeure: Notwithstanding anything contained in the purchase order or any other document relevant thereto, neither party shall be liable for any failure or delay in performance to the extent said failures or delays are caused by the "Act of God" and occurring without its fault or negligence, provided that, force majeure will apply only if the failure to perform could not be avoided by the exercise of due care and vendor doing everything reasonably possible to resume its performance.

    A party affected by an event of force majeure which may include fire, tempest, floods, earthquake, riot, war, damage by aircraft etc., shall give the other party written notice, with full details as soon as possible and in any event not later than seven (7) calendar days of the occurrence of the cause relied upon. If force majeure applies, dates by which performance obligations are scheduled to be met will be extended for a period of time equal to the time lost due to any delay so caused.

    Notwithstanding above provisions, in an event of Force Majeure, BHEL reserves for itself the right to cancel the order/ contract, wholly or partly, in order to meet the overall project schedule and make alternative arrangements for completion of deliveries and other schedules.

25. Warranty:
    Wherever required, and so provided in the specifications/ Purchaser Order, the Seller shall ensure that the goods supplied shall comply with the specifications laid down, for materials, workmanship and performance.

    Unless otherwise specified in SCC, warranty period shall be applicable for a period of 24 months from the date of delivery of goods or 18 months from the date of commissioning of goods, whichever is earlier.

    The warranty period as described above shall apply afresh to replaced, repaired or re-executed parts of a delivery. Unless otherwise specifically provided in the Purchase Order, Vendor's liability shall be co terminus with the expiration of the applicable warranty period.

26. Limitation of Liability: Vendor's liability towards this contract is limited to a maximum of 100% of the contract value and consequential damages are excluded. However the limits of liability will have no effect in cases of criminal negligence or wilful misconduct.

    The total liability of Vendor for all claims arising out of or relating to the performance or breach of the Contract or use of any Products or Services or any order shall not exceed the total Contract price.

27. Liability during warranty: Vendor shall arrange replacement / repair of all the defective materials / services under its obligation during the warranty period. The rejected goods shall be taken away by vendor and replaced / repaired. In the event of the vendor's failure to comply, BHEL may take appropriate action including disposal of rejections and replenishment by any other sources at the cost and risk of the vendor.

    In case, defects attributable to vendor are detected during Warranty period or where the commissioning call is issued within the warranty period, vendor shall be responsible for replacement/ repair of the goods as required by BHEL at vendor's cost even after expiry of warranty period.

    Further if the equipment or any part thereof cannot be used by reason of such defect and/or making good of such defect, the warranty period of the equipment or such part, as the case may be, shall be extended by a period equal to the period during which the equipment or such part cannot be used by BHEL because of any of the aforesaid reasons. Upon correction of the defects in the facilities or any part thereof by repair/replacement, such repair/replacement shall have the warranty period for a period of twelve (12) months from the time such replacement/repair of the equipment or any part thereof has been completed.

28. Liability after warranty period: At the end of the warranty, the Vendor's liability ceases except for latent defects. For the purpose of this clause, latent defects shall be the defects inherently lying within the material or arising out of design deficiency which do not manifest themselves during the warranty Period, but later. The Contractor's liability for latent defects warranty for the equipment including spares shall be limited to a period of six months from the end of the warranty period of the respective equipment including spares or first time commissioning, whichever is later but not later than one (01) year from the date of expiry of warranty period.

29. Compliance with Laws: Vendor shall, in performing the contract, comply with all applicable laws. The vendor shall make all remittances, give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the laws in relation to the execution and completion of the contract and for remedying of any defects; and the Contractor shall indemnify and hold BHEL harmless against and from the consequences of any failure to do so.

30. Settlement of Disputes:Except as otherwise specifically provided in the Purchase Order, decision of BHEL shall be binding on the vendor with respect to all questions relating to the interpretation or meaning of the terms and conditions and instructions herein before mentioned and as to the completion of supplies/work/services, other questions, claim, right, matter or things whatsoever in any way arising out of or relating to the contract, instructions, orders or these conditions or otherwise concerning the supply or the execution or failure to execute the order, whether arising during the schedule of supply/work or after the completion or abandonment thereof. Any disputes or differences among the parties shall to the extent possible be settled amicably between the parties thereto, failing which the disputed issues shall be settled through arbitration. Vendor shall continue to perform the contract, pending settlement of dispute(s).

31. Arbitration Clause in case of Contract with vendors other than Public Sector Enterprise (PSE) or a Government Department:

    Arbitration & Conciliation:

    The parties shall attempt to settle any disputes 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, or in connection with this contract through friendly discussions. In case no amicable settlement can be reached between the parties through such discussions, in respect of any dispute; 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–EDN. Such Sole Arbitrator appointed, shall conduct the arbitration in English language.

    The Arbitrator shall pass a reasoned award and the award of the Arbitration 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 Bangalore.
    The cost of arbitration shall be borne as decided by the Arbitrator upon him entering the reference.
    Subject to the Arbitration Clause as above, the Courts at Bangalore alone 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 parties shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and efficiency in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

Arbitration Clause in case of Contract with a Public Sector Enterprise (PSE) or a Government Department:

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.'

32. Applicable Laws and Jurisdiction of Courts: Prevailing Indian laws both substantive and procedural, including modifications thereto, shall govern the Contract. Subject to the conditions as aforesaid, the competent courts in Bangalore alone shall have jurisdiction to consider over any matters touching upon this contract.

33. General Terms: That any non-exercise, forbearance or omission of any of the powers conferred on BHEL and /or any of its authorities will not in any manner constitute waiver of the conditions hereto contained in these presents.
That the headings used in this agreement are for convenience of reference only.
That all notices etc., to be given under the Purchase order shall be in writing, type script or printed and if sent by registered post or by courier service to the address given in this document shall be deemed to have been served on the date when in the ordinary course, they would have been delivered to the addressee.

PROJECTs:-

1) PATRATU 3X800MW

2) CHANDRAPUR R&M

PURCHASE SPECIFICATIONS FOR TEMPERATURE TRANSMITTERS

(SINGLE INPUT DIN Rail type)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED	ISSUED	DATE
Sandeep	416	19/10/2023

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SCOPE OF SUPPLY
FOR
TEMPERATURE TRANSMITTERS
(SINGLE INPUT DIN Rail type)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED	ISSUED	DATE
Sandeep	416	19/10/2023

SCOPE OF SUPPLY

1.0 **TEMPERATURE TRANSMITTER'S** as per technical Requirements Ref: CE / 416/ TTxr (SINGLE I/P DIN RAIL) / TR Rev.00 & respective BOM enclosed.

2.0 Quantity of Single input DIN-Rail mounted temperature transmitters:

Sl.No	Project	Unit-1 Qty	Unit-2 Qty	Unit-3 Qty	Mand. Spares qty	Total* (No's)
1	PATRATU 3X800MW	1010 Nos	980 Nos	980 Nos	297 Nos	**3267 Nos**
2	CHANDRAPUR 2X500MW R&M	190 Nos	190 Nos	NA	19 Nos	**399 Nos**

*Mandatory spares quantity shall be allocated in proportion to main quantity.

Above qty specified may undergo changes during detailed Engg.

3.0 GENERAL TERMS & CONDITIONS

3.1 Considering possibilities of change in requirement, i.e. addition & deletion of quantities for individual project BOM at a later date after system design finalisation, the vendor must clearly quote unit price as well as lot price for all items, including mandatory spares for indisputable calculations of lot prices in case of revised quantities later.

3.2 In case of quantity change, unit rates shall be applicable. However in case of item change for a project, if the required model is not available in the original offer, the unit price of another model, for the same range but with features having the closest similarity to the required one, quoted elsewhere in another variant or another group, shall be applicable.

3.3 Although transmitter are allowed to be indigenously assembled, calibrated & certified, but considering the fact that not yet any indigenous sensors & electronics are offered and acceptable to most customers, the sensors and electronics should preferably be procured from vendors' own principals.

3.4 Model selection is sole responsibility of vendor with clear understanding of specification requirement. Any change in basic model & accessories during technical evaluation **shall not be allowed.** In case of any doubt regarding the intent of specification technically, vendor shall interact with the purchaser & get the doubts clarified well before the due date of technical bid submission to **minimize the deviation from spec. & the chances of rejection.** Also any doubt is there in spec. for the parameters to be offered or not then same may be offered as alternate without any ambiguity.

3.5 **PROVENNESS (APPLICABLE FOR PATRATU PROJECT ONLY) :** Offered transmitters shall have at least one year's satisfactory in one power station having unit rating of 200MW or above.

4.0 DOCUMENTS REQUIREMENT

Following documents shall be furnished to BHEL as a minimum, apart from any other documents required to be submitted as called for elsewhere or as deemed necessary. The same shall be for the complete equipment offered including TEMPERATURE Transmitters other peripherals etc.

4.1 Along with Technical offer in one (01) set of these documents :

a) Bill of Material
b) Drawings (GA/layout/wiring/interconnection/schematic, etc.)
c) Technical literatures/Catalogs/Clause-wise compliance/deviation list to Specification(Refer 5.0)

4.2 Within one week from the date of placement of Order for BHEL/CUSTOMER approval, following documents in PDF format as a single file against each purchase order (P.O.):

a) Bill of Material
b) Data Sheet
c) Drawings (GA/layout/wiring/interconnection/schematic, etc.)
d) Technical literatures/Catalogs
e) Quality Plan.

4.3 Before inspection of Material ,following documents for BHEL/ CUSTOMER review & acceptance against each purchase order:-

a) Test Certificates/Reports and Approved Quality Plan.
b) Preliminary Instruction/O&M Manual.

4.4 At the time of Material dispatch, following documents to BHEL against each purchase order:-

a) Instruction/O&M Manual
b) Bill of Material
c) Data Sheets
d) Drawings (GA/layout/wiring/interconnection/schematic, etc.)
e) Technical literatures/Catalogs.

NOTE: These documents shall be in final as-built/approved status. Apart from above one (01) set of Instruction / O&M Manual shall also be sent directly to site along with each system against each purchase order.

4.5 One (01) set soft copy of Final documents as mentioned at clause above shall also be provided to BHEL against each purchase order. The soft copy shall be in PDF format.

5.0 In case no Clause-wise compliance/deviation list is furnished & deviation is found during technical evaluation, then the offer is liable for technical rejection on the grounds of not meeting the specification.

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TECHNICAL REQUIREMENTS FOR TEMPERATURE TRANSMITTERS

(SINGLE INPUT DIN Rail type)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED	ISSUED	DATE
Sandeep	416	19/10/2023

TECHNICAL REQUIREMENTS

REQUIREMENTS FOR TEMPERATURE TRANSMITTERS

1.0 Temperature transmitter shall be of SMART type and shall be used for receiver instrument or control loop requiring signal conversion. They shall have either resistance or thermocouple type measuring system.

2.0 Following types of 2-wire temperature transmitter (directly powdered from 4-20 mA input cards of DDCMlS) shall be provided. The temperature transmitter shall be fully compatible with thermocouples and RTDs being provided by the BHEL. Temperature compensation of the thermocouples shall be performed in the temperature transmitter itself.

2.1 Single Input DIN-rail mounted Temperature Transmitter
These shall be suitable for mounting on DIN-rails in JBs. This temperature transmitter shall be the ones which are especially designed for **DIN-rail mounting with IP 20 protection classes**. These shall have terminals for input/output provided on front side when mounted on DIN-rail. Head mounted temperature transmitter with clamps to make it suitable for DIN-rail mounting shall not be acceptable under this category.

2.2 Common requirements for each of the above type of temperature transmitters

2.2.1 The transmitter output shall be compatible with major instrumentation selected. Adjustable spans and suppressed ranges shall be provided where required by process consideration. Thermocouple burn-out or RTD wire-break protection for “failsafe” condition shall be provided.

2.2.2 Transmitters shall have easily accessible span and zero adjustment facilities and shall meet the following minimum requirements:-

Output	:	2-wire (power supply from input card of Control System) with 4-20mA output with superimposed HART protocol signal.
Input	:	Same transmitter shall be capable to handle Pt-100 RTD , Thermocouples –K, R & other types (**input type to be selectable at site through HART terminal at site from TC to RTD & vice versa**)
Isolation	:	should be optically isolated from power circuit (Min. 500V AC)
Output load	:	min 600 ohms at 24VDC.

Operating ambient Temperature : 0 to 85 deg C (Without indicator)

Power supply : Uv=24VDC (admissible tolerance 13Vdc <= Uv <= 45Vdc) or compatible with input module of Control System.

Composite Accuracy : RTD =<0.4% of 0-250 deg C span
T/C-K type =<0.4% of 0-600 deg C span
T/C-R type =<0.4% of 0-1000 deg C span
CJC accuracy (for T/C) shall be =< 1deg C

(Composite Accuracy is to be calculated as summation of all applicable accuracies of temp transmitter, for converting sensor input to output in 4-20 mA (e.g., basic accuracy, digital accuracy, D/A accuracy, etc.) and temperature effect on these accuracies at ambient temperature of 50 deg C, based on the figure/ formula given in the standard product catalogue for span as specified above for various types of Temperature Elements. specified. All such accuracy/ temp effect figures in catalogue shall be first converted to deg C, and then percentage of this converted accuracy in specified span shall be calculated to compare with the specified composite accuracy figures.)

EMC Compatibility : as per EN 61326

3.0 Transmitters shall be provided with following features

- Sensor drifts alarm for sensor failure prediction also for zero shifts.
- RFI / EMI Effect: Conforming to EEC standards.
- Accepts any of the sensor type (RTD, TC, mV or ohms)
- Ambient temperature compensation (Cold junction compensation shall be provided in-built with the equipment).
- In case of failure (open or burn-out) of RTD/thermocouple, temp. Transmitter shall provide low temperature output.

4. The product and make shall be selected so that with one make of transmitter all applications with respect to measuring rages temperature sensor (resistance thermometer / thermocouple) and connection type (2/3/4) wire connection of resistance thermometers) shall be covered. In a nutshell, the transmitter shall be universal type.

5. The offered make shall be registered in HART foundation and the device operable by universal HART communicator.

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BILL OF MATERIAL
FOR
TEMPERATURE TRANSMITTERS

(SINGLE INPUT DIN Rail type)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED	ISSUED	DATE
Sandeep	416	19/10/2023

PATRATU 3X800MW - BOM OF SINGLE INPUT DIN RAIL MOUNTED TEMPERATURE TRANSMITTERS

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
1	NA	10LBG70 CT001	20LBG70 CT001	30LBG70 CT001	SCAPH SYS I/L TEMP	TC-K	0-400	DEG C	0	1	1	1
2	NA	10LBG77 CT001	20LBG77 CT001	30LBG77 CT001	SEC SCAPH DRN TO FT TEMP	TC-K	0-400	DEG C	0	1	1	1
3	NA	10HAN11 CT001	20HAN11 CT001	30HAN11 CT001	FLASH TNK DRN TNK DRN LINE TEMP	RTD	0-200	DEG C	0	1	1	1
4	NA	10LCL20CT001	20LCL20CT001	30LCL20CT001	FLASH TNK DRN TNK TEMP	RTD	0-200	DEG C	0	1	1	1
5	NA	10QHX10 CT001	20QHX10 CT001	30QHX10 CT001	CLNG WTR SUPPLY TEMP	RTD	0-60	DEG C	0	1	1	1
6	NA	10QHX11 CT001	20QHX11 CT001	30QHX11 CT001	CLNG WTR RET TEMP	RTD	0-60	DEG C	0	1	1	1
7	NA	10LAB91CT002	20LAB91CT002	30LAB91CT002	FW I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
8	NA	10LAB91CT003	20LAB91CT003	30LAB91CT003	FW I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
9	NA	10LAB91CT001	20LAB91CT001	30LAB91CT001	FW LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
10	NA	10HAG15CT002	20HAG15CT002	30HAG15CT002	BWCP SUC LINE TEMP	TC-K	0-500	DEG C	0	1	1	1
11	NA	10HAG15CT003	20HAG15CT003	30HAG15CT003	W/U THRU AUX WTR RET TEMP	TC-K	0-500	DEG C	0	1	1	1
12	NA	10HAG15CT004	20HAG15CT004	30HAG15CT004	W/U THRU AUX WTR RET TEMP	TC-K	0-500	DEG C	0	1	1	1
13	NA	10HAG15CT005	20HAG15CT005	30HAG15CT005	W/U LINE TO BLR RECIRC SYS TEMP	TC-K	0-500	DEG C	0	1	1	1
14	NA	10HAG27CT001	20HAG27CT001	30HAG27CT001	BWCP CLNG WTR SUPPLY TEMP	RTD	0-150	DEG C	0	1	1	1
15	NA	10HAG27CT002	20HAG27CT002	30HAG27CT002	BWCP CLNG WTR RET TEMP	RTD	0-150	DEG C	0	1	1	1
16	NA	10HAC10CT003	20HAC10CT003	30HAC10CT003	ECON DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
17	NA	10HAC10CT001	20HAC10CT001	30HAC10CT001	ECON I/L FW TEMP	TC-K	0-500	DEG C	0	1	1	1
18	NA	10HAC10CT002	20HAC10CT002	30HAC10CT002	ECON I/L FW TEMP	TC-K	0-500	DEG C	0	1	1	1
19	NA	10HAC20CT001	20HAC20CT001	30HAC20CT001	ECON O/L LINK TEMP	TC-K	0-500	DEG C	0	1	1	1
20	NA	10HAC20CT002	20HAC20CT002	30HAC20CT002	ECON O/L LINK TEMP	TC-K	0-500	DEG C	0	1	1	1
21	NA	10HAC20CT003	20HAC20CT003	30HAC20CT003	ECON MIXING LINE TEMP	TC-K	0-500	DEG C	0	1	1	1
22	NA	10HAC20CT004	20HAC20CT004	30HAC20CT004	ECON MIXING LINE TEMP	TC-K	0-500	DEG C	0	1	1	1
23	NA	10HAD03CT001	20HAD03CT001	30HAD03CT001	FURN LWR FRNT I/L HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
24	NA	10HAD10CT051	20HAD10CT051	30HAD10CT051	FURN INTER SIDE HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
25	NA	10HAD10CT052	20HAD10CT052	30HAD10CT052	FURN INTER SIDE HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
26	NA	10HAD20CT052	20HAD20CT052	30HAD20CT052	FURN INTER FRNT HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
27	NA	10HAD20CT053	20HAD20CT053	30HAD20CT053	FURN INTER FRNT HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
28	NA	10HAD30CT052	20HAD30CT052	30HAD30CT052	FURN INTER RER HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
29	NA	10HAD30CT053	20HAD30CT053	30HAD30CT053	FURN INTER RER HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
30	NA	10HAD40CT051	20HAD40CT051	30HAD40CT051	FURN INTER SIDE HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
31	NA	10HAD40CT052	20HAD40CT052	30HAD40CT052	FURN INTER SIDE HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
32	NA	10HAH01CT001	20HAH01CT001	30HAH01CT001	WTR SEPARATOR-A O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
33	NA	10HAH01CT002	20HAH01CT002	30HAH01CT002	WTR SEPARATOR-A O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
34	NA	10HAH02CT001	20HAH02CT001	30HAH02CT001	WTR SEPARATOR-B O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
35	NA	10HAH02CT002	20HAH02CT002	30HAH02CT002	WTR SEPARATOR-B O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
36	NA	10HAH03CT001	20HAH03CT001	30HAH03CT001	WTR SEPARATOR-C O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
37	NA	10HAH03CT002	20HAH03CT002	30HAH03CT002	WTR SEPARATOR-C O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
38	NA	10HAH04CT001	20HAH04CT001	30HAH04CT001	WTR SEPARATOR-D O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
39	NA	10HAH04CT002	20HAH04CT002	30HAH04CT002	WTR SEPARATOR-D O/L TEMP	TC-K	0-600	DEG C	0	1	1	1
40	NA	10HAD71CT001	20HAD71CT001	30HAD71CT001	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
41	NA	10HAD71CT002	20HAD71CT002	30HAD71CT002	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
42	NA	10HAD71CT003	20HAD71CT003	30HAD71CT003	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
43	NA	10HAD71CT004	20HAD71CT004	30HAD71CT004	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
44	NA	10HAD71CT005	20HAD71CT005	30HAD71CT005	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
45	NA	10HAD71CT006	20HAD71CT006	30HAD71CT006	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
46	NA	10HAD71CT007	20HAD71CT007	30HAD71CT007	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
47	NA	10HAD71CT008	20HAD71CT008	30HAD71CT008	WTR SEPARATOR-A TEMP	TC-K	0-800	DEG C	0	1	1	1
48	NA	10HAD72CT001	20HAD72CT001	30HAD72CT001	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
49	NA	10HAD72CT002	20HAD72CT002	30HAD72CT002	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
50	NA	10HAD72CT003	20HAD72CT003	30HAD72CT003	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
51	NA	10HAD72CT004	20HAD72CT004	30HAD72CT004	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
52	NA	10HAD72CT005	20HAD72CT005	30HAD72CT005	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
53	NA	10HAD72CT006	20HAD72CT006	30HAD72CT006	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
54	NA	10HAD72CT007	20HAD72CT007	30HAD72CT007	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
55	NA	10HAD72CT008	20HAD72CT008	30HAD72CT008	WTR SEPARATOR-B TEMP	TC-K	0-800	DEG C	0	1	1	1
56	NA	10HAD73CT001	20HAD73CT001	30HAD73CT001	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
57	NA	10HAD73CT002	20HAD73CT002	30HAD73CT002	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
58	NA	10HAD73CT003	20HAD73CT003	30HAD73CT003	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
59	NA	10HAD73CT004	20HAD73CT004	30HAD73CT004	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
60	NA	10HAD73CT005	20HAD73CT005	30HAD73CT005	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
61	NA	10HAD73CT006	20HAD73CT006	30HAD73CT006	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
62	NA	10HAD73CT007	20HAD73CT007	30HAD73CT007	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
63	NA	10HAD73CT008	20HAD73CT008	30HAD73CT008	WTR SEPARATOR-C TEMP	TC-K	0-800	DEG C	0	1	1	1
64	NA	10HAD74CT001	20HAD74CT001	30HAD74CT001	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
65	NA	10HAD74CT002	20HAD74CT002	30HAD74CT002	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
66	NA	10HAD74CT003	20HAD74CT003	30HAD74CT003	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
67	NA	10HAD74CT004	20HAD74CT004	30HAD74CT004	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
68	NA	10HAD74CT005	20HAD74CT005	30HAD74CT005	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
69	NA	10HAD74CT006	20HAD74CT006	30HAD74CT006	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
70	NA	10HAD74CT007	20HAD74CT007	30HAD74CT007	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
71	NA	10HAD74CT008	20HAD74CT008	30HAD74CT008	WTR SEPARATOR-D TEMP	TC-K	0-800	DEG C	0	1	1	1
72	NA	10HAD81CT001	20HAD81CT001	30HAD81CT001	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
73	NA	10HAD81CT002	20HAD81CT002	30HAD81CT002	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
74	NA	10HAD81CT003	20HAD81CT003	30HAD81CT003	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
75	NA	10HAD81CT004	20HAD81CT004	30HAD81CT004	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
76	NA	10HAD81CT005	20HAD81CT005	30HAD81CT005	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
77	NA	10HAD81CT006	20HAD81CT006	30HAD81CT006	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
78	NA	10HAD81CT007	20HAD81CT007	30HAD81CT007	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
79	NA	10HAD81CT008	20HAD81CT008	30HAD81CT008	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
80	NA	10HAD81CT009	20HAD81CT009	30HAD81CT009	SEPARATOR STRG TANK-A TEMP	TC-K	0-800	DEG C	0	1	1	1
81	NA	10HAD82CT001	20HAD82CT001	30HAD82CT001	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
82	NA	10HAD82CT002	20HAD82CT002	30HAD82CT002	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
83	NA	10HAD82CT003	20HAD82CT003	30HAD82CT003	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
84	NA	10HAD82CT004	20HAD82CT004	30HAD82CT004	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
85	NA	10HAD82CT005	20HAD82CT005	30HAD82CT005	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
86	NA	10HAD82CT006	20HAD82CT006	30HAD82CT006	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
87	NA	10HAD82CT007	20HAD82CT007	30HAD82CT007	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
88	NA	10HAD82CT008	20HAD82CT008	30HAD82CT008	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
89	NA	10HAD82CT009	20HAD82CT009	30HAD82CT009	SEPARATOR STRG TANK-B TEMP	TC-K	0-800	DEG C	0	1	1	1
90	NA	10HAG15CT001	20HAG15CT001	30HAG15CT001	WTR STRG TNK DOWNCOMER TEMP	TC-K	0-500	DEG C	0	1	1	1
91	NA	10HAH02CT003	20HAH02CT003	30HAH02CT003	SH FURN ROOF I/L HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
92	NA	10HAH14CT001	20HAH14CT001	30HAH14CT001	BP LOWER REAR HDR DRAIN TEMP	TC-K	0-500	DEG C	0	1	1	1
93	NA	10HAH14CT002	20HAH14CT002	30HAH14CT002	BP LOWER FRNT HDR DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
94	NA	10HAH26CT001	20HAH26CT001	30HAH26CT001	LINK TO SH FRNT PLTN I/L HDR TEMP	TC-K	0-600	DEG C	0	1	1	1
95	NA	10HAH26CT002	20HAH26CT002	30HAH26CT002	LINK TO SH FRONT PLTN I/L HDR TEMP	TC-K	0-600	DEG C	0	1	1	1
96	NA	10LAE71CT001	20LAE71CT001	30LAE71CT001	SH / DSH STAGE-I-A SPRY WTR TEMP	TC-K	0-500	DEG C	0	1	1	1
97	NA	10LAE72CT001	20LAE72CT001	30LAE72CT001	SH / DSH STAGE-I-B SPRY WTR TEMP	TC-K	0-500	DEG C	0	1	1	1
98	NA	10HAH71CT001	20HAH71CT001	30HAH71CT001	SH / DSH STAGE-I-A I/L TEMP	TC-K	0-750	DEG C	0	1	1	1
99	NA	10HAH71CT002	20HAH71CT002	30HAH71CT002	SH / DSH STAGE-I-A I/L TEMP	TC-K	0-750	DEG C	0	1	1	1
100	NA	10HAH72CT001	20HAH72CT001	30HAH72CT001	SH / DSH STAGE-I-B I/L TEMP	TC-K	0-750	DEG C	0	1	1	1
101	NA	10HAH72CT002	20HAH72CT002	30HAH72CT002	SH / DSH STAGE-I-B I/L TEMP	TC-K	0-750	DEG C	0	1	1	1
102	NA	10HAH71CT003	20HAH71CT003	30HAH71CT003	SH / DSH STAGE-I-A O/L TEMP	TC-K	0-750	DEG C	0	1	1	1
103	NA	10HAH71CT004	20HAH71CT004	30HAH71CT004	SH / DSH STAGE-I-A O/L TEMP	TC-K	0-750	DEG C	0	1	1	1
104	NA	10HAH71CT005	20HAH71CT005	30HAH71CT005	SH / DSH STAGE-I-A O/L TEMP	TC-K	0-750	DEG C	0	1	1	1
105	NA	10HAH72CT003	20HAH72CT003	30HAH72CT003	SH / DSH STAGE-I-B I/L TEMP	TC-K	0-750	DEG C	0	1	1	1
106	NA	10HAH72CT004	20HAH72CT004	30HAH72CT004	SH / DSH STAGE-I-B O/L TEMP	TC-K	0-750	DEG C	0	1	1	1
107	NA	10HAH72CT005	20HAH72CT005	30HAH72CT005	SH / DSH STAGE-I-B O/L TEMP	TC-K	0-750	DEG C	0	1	1	1
108	NA	10LAE91CT001	20LAE91CT001	30LAE91CT001	SH / DSH STAGE-II-A SPRY WTR TEMP	TC-K	0-500	DEG C	0	1	1	1
109	NA	10LAE92CT001	20LAE92CT001	30LAE92CT001	SH / DSH STAGE-II-B SPRY WTR TEMP	TC-K	0-500	DEG C	0	1	1	1
110	NA	10HAH91CT001	20HAH91CT001	30HAH91CT001	SH / DSH STAGE-II-A I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
111	NA	10HAH91CT002	20HAH91CT002	30HAH91CT002	SH / DSH STAGE-II-A I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
112	NA	10HAH92CT001	20HAH92CT001	30HAH92CT001	SH / DSH STAGE-II-B I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
113	NA	10HAH92CT002	20HAH92CT002	30HAH92CT002	SH / DSH STAGE-II-B I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
114	NA	10HAH91CT003	20HAH91CT003	30HAH91CT003	SH / DSH STAGE-II-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
115	NA	10HAH91CT004	20HAH91CT004	30HAH91CT004	SH / DSH STAGE-II-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
116	NA	10HAH91CT005	20HAH91CT005	30HAH91CT005	SH / DSH STAGE-II-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
117	NA	10HAH92CT003	20HAH92CT003	30HAH92CT003	SH / DSH STAGE-II-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
118	NA	10HAH92CT004	20HAH92CT004	30HAH92CT004	SH / DSH STAGE-II-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
119	NA	10HAH92CT005	20HAH92CT005	30HAH92CT005	SH / DSH STAGE-II-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
120	NA	10LAE21CT001	20LAE21CT001	30LAE21CT001	RH / DSH-A SPRY WTR TEMP	TC-K	0-300	DEG C	0	1	1	1
121	NA	10LAE22CT001	20LAE22CT001	30LAE22CT001	RH / DSH-B SPRY WTR TEMP	TC-K	0-300	DEG C	0	1	1	1
122	NA	10HAJ21CT001	20HAJ21CT001	30HAJ21CT001	RH / DSH-A I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
123	NA	10HAJ21CT002	20HAJ21CT002	30HAJ21CT002	RH / DSH-A I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
124	NA	10HAJ22CT001	20HAJ22CT001	30HAJ22CT001	RH / DSH-B I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
125	NA	10HAJ22CT002	20HAJ22CT002	30HAJ22CT002	RH / DSH-B I/L TEMP	TC-K	0-800	DEG C	0	1	1	1
126	NA	10HAJ21CT003	20HAJ21CT003	30HAJ21CT003	RH / DSH-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
127	NA	10HAJ21CT004	20HAJ21CT004	30HAJ21CT004	RH / DSH-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
128	NA	10HAJ21CT005	20HAJ21CT005	30HAJ21CT005	RH / DSH-A O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
129	NA	10HAJ22CT003	20HAJ22CT003	30HAJ22CT003	RH / DSH-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
130	NA	10HAJ22CT004	20HAJ22CT004	30HAJ22CT004	RH / DSH-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
131	NA	10HAJ22CT005	20HAJ22CT005	30HAJ22CT005	RH / DSH-B O/L TEMP	TC-K	0-800	DEG C	0	1	1	1
132	NA	10HAG25CT001	20HAG25CT001	30HAG25CT001	BCP CASING	TC-K	0-150	DEG C	0	1	1	1
133	NA	10HAG25CT005	20HAG25CT005	30HAG25CT005	BCP CASING	TC-K	0-150	DEG C	0	1	1	1
134	NA	10HAG25CT002	20HAG25CT002	30HAG25CT002	BCP MOTOR CAVITY	TC-K	0-150	DEG C	0	1	1	1
135	NA	10HAG25CT003	20HAG25CT003	30HAG25CT003	BCP MOTOR CAVITY	TC-K	0-150	DEG C	0	1	1	1
136	NA	10HAG25CT004	20HAG25CT004	30HAG25CT004	BCP MOTOR CAVITY	TC-K	0-150	DEG C	0	1	1	1
137	NA	10LBG10CT011	20LBG10CT011	30LBG10CT011	MS TEMP TO APRDS	TC-K	0-650	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
138	NA	10LBG20CT011	20LBG20CT011	30LBG20CT011	CRH STM TEMP TO APRDS	TC-K	0-500	DEG C	0	1	1	1
139	NA	10LAF10CT011	20LAF10CT011	30LAF10CT011	PRDS SPRY WTR FRM CEP TEMP	RTD	0-100	DEG C	0	1	1	1
140	NA	10LBG30CT011	20LBG30CT011	30LBG30CT011	AUX STM HDR TEMP	TC-K	0-400	DEG C	0	1	1	1
141	NA	10LBG30CT012	20LBG30CT012	30LBG30CT012	AUX STM HDR TEMP	TC-K	0-400	DEG C	0	1	1	1
142	NA	10LAA01CT011	20LAA01CT011	30LAA01CT011	DEA TEMP	RTD	0-250	DEG C	0	1	1	1
143	NA	10LAA01CT012	20LAA01CT012	30LAA01CT012	DEA TEMP	RTD	0-250	DEG C	0	1	1	1
144	NA	10LCA20CT011	20LCA20CT011	30LCA20CT011	GSC I/L COND TEMP	RTD	0-100	DEG C	0	1	1	1
145	NA	10LCA20CT012	20LCA20CT012	30LCA20CT012	GSC O/L COND TEMP	RTD	0-100	DEG C	0	1	1	1
146	NA	10LCA62CT011	20LCA62CT011	30LCA62CT011	DRAIN CLR I/L TEMP	RTD	0-100	DEG C	0	1	1	1
147	NA	10LCA62CT013	20LCA62CT013	30LCA62CT013	LPH-1 O/L COND TEMP	RTD	0-120	DEG C	0	1	1	1
148	NA	10LCA62CT012	20LCA62CT012	30LCA62CT012	LPH-1 I/L COND TEMP	RTD	0-100	DEG C	0	1	1	1
149	NA	10LCA72CT011	20LCA72CT011	30LCA72CT011	LPH-2 I/L COND TEMP	RTD	0-120	DEG C	0	1	1	1
150	NA	10LCA72CT012	20LCA72CT012	30LCA72CT012	LPH-2 O/L COND TEMP	RTD	0-150	DEG C	0	1	1	1
151	NA	10LCA82CT011	20LCA82CT011	30LCA82CT011	LPH-3 I/L COND TEMP	RTD	0-150	DEG C	0	1	1	1
152	NA	10LCA82CT012	20LCA82CT012	30LCA82CT012	LPH-3 O/L COND TEMP	RTD	0-200	DEG C	0	1	1	1
153	NA	10LCA90CT014	20LCA90CT014	30LCA90CT014	DEA I/L COND TEMP	RTD	0-250	DEG C	0	1	1	1
154	NA	10LCA90CT015	20LCA90CT015	30LCA90CT015	DEA I/L COND TEMP	RTD	0-250	DEG C	0	1	1	1
155	NA	10LCA90CT013	20LCA90CT013	30LCA90CT013	DEA I/L COND TEMP (BEF FE)	RTD	0-250	DEG C	0	1	1	1
156	NA	10LCA90CT011	20LCA90CT011	30LCA90CT011	LPH-5 I/L COND TEMP	RTD	0-200	DEG C	0	1	1	1
157	NA	10LCA90CT012	20LCA90CT012	30LCA90CT012	LPH-5 O/L COND TEMP	RTD	0-250	DEG C	0	1	1	1
158	NA	10LCA62CT013	20LCA62CT013	30LCA62CT013	LPH-1 O/L COND TEMP	RTD	0-120	DEG C	0	1	1	1
159	NA	10LCA92CT011	20LCA92CT011	30LCA92CT011	LPH-4 I/L COND TEMP	RTD	0-200	DEG C	0	1	1	1
160	NA	10LCA92CT012	20LCA92CT012	30LCA92CT012	LPH-4 O/L COND TEMP	RTD	0-200	DEG C	0	1	1	1
161	NA	10LS-EXT-01	20LS-EXT-01	30LS-EXT-01	EXT STM TEMP TO BFPT-A&B	TC-K	0-500	DEG C	0	1	1	1
162	NA	10LBQ10CT011	20LBQ10CT011	30LBQ10CT011	CRH STM TEMP TO D/A PEGG	TC-K	0-500	DEG C	0	1	1	1
163	NA	10LBQ71CT011	20LBQ71CT011	30LBQ71CT011	EXT TEMP FRM IPT TO HPH-7A DES HTR	TC-K	0-600	DEG C	0	1	1	1
164	NA	10LBQ72CT011	20LBQ72CT011	30LBQ72CT011	EXT TEMP FRM IPT TO HPH-7B DES HTR	TC-K	0-600	DEG C	0	1	1	1
165	NA	10LBQ73CT011	20LBQ73CT011	30LBQ73CT011	EXT STM TEMP AT HPH-7A I/L	TC-K	0-500	DEG C	0	1	1	1
166	NA	10LBQ74CT011	20LBQ74CT011	30LBQ74CT011	EXT STM TEMP AT HPH-7B I/L	TC-K	0-500	DEG C	0	1	1	1
167	NA	10LBQ91CT011	20LBQ91CT011	30LBQ91CT011	EXT STM TEMP AT HPH-9A I/L	TC-K	0-550	DEG C	0	1	1	1
168	NA	10LBQ92CT011	20LBQ92CT011	30LBQ92CT011	EXT STM TEMP AT HPH-9B I/L	TC-K	0-550	DEG C	0	1	1	1
169	NA	10LBQ81CT011	20LBQ81CT011	30LBQ81CT011	EXT STM TEMP AT HPH-8A I/L	TC-K	0-550	DEG C	0	1	1	1
170	NA	10LBQ82CT011	20LBQ82CT011	30LBQ82CT011	EXT STM TEMP AT HPH-8B I/L	TC-K	0-550	DEG C	0	1	1	1
171	NA	10LBS21CT011	20LBS21CT011	30LBS21CT011	EXT STM TEMP AT LPH-2 I/L	RTD	0-150	DEG C	0	1	1	1
172	NA	10LBS31CT011	20LBS31CT011	30LBS31CT011	EXT STM TEMP AT LPH-3 I/L	RTD	0-250	DEG C	0	1	1	1
173	NA	10LBS41CT011	20LBS41CT011	30LBS41CT011	EXT STM TEMP AT LPH-4 I/L	TC-K	0-400	DEG C	0	1	1	1
174	NA	10LBS51CT011	20LBS51CT011	30LBS51CT011	EXT STM TEMP AT LPH-5 I/L	TC-K	0-400	DEG C	0	1	1	1
175	NA	10LBS61CT011	20LBS61CT011	30LBS61CT011	EXT STM TEMP TO DEA	TC-K	0-500	DEG C	0	1	1	1
176	NA	10LAB10CT011	20LAB10CT011	30LAB10CT011	TDBFP-A BP SUC TEMP	RTD	0-250	DEG C	0	1	1	1
177	NA	10LAB10CT013	20LAB10CT013	30LAB10CT013	TDBFP-A BP DISCH TEMP	RTD	0-250	DEG C	0	1	1	1
178	NA	10LAB20CT011	20LAB20CT011	30LAB20CT011	TDBFP-B BP SUC TEMP	RTD	0-250	DEG C	0	1	1	1
179	NA	10LAB20CT013	20LAB20CT013	30LAB20CT013	TDBFP-B BP DISCH TEMP	RTD	0-250	DEG C	0	1	1	1
180	NA	10LAB24CT101	20LAB24CT101	30LAB24CT101	BFP INT STG TO RH SPRY TEMP	RTD	0-250	DEG C	0	1	1	1
181	NA	10LAB30CT011	20LAB30CT011	30LAB30CT011	MDBFP-C BP SUC TEMP	RTD	0-250	DEG C	0	1	1	1
182	NA	10LAB30CT013	20LAB30CT013	30LAB30CT013	MDBFP-C BP DISCH TEMP	RTD	0-250	DEG C	0	1	1	1
183	NA	10LAB40CT014	20LAB40CT014	30LAB40CT014	BFP DISCH HDR TEMP	RTD	0-250	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
184	NA	10LAB41CT011	20LAB41CT011	30LAB41CT011	FW TEMP AT HPH-7A I/L	RTD	0-250	DEG C	0	1	1	1
185	NA	10LAB42CT011	20LAB42CT011	30LAB42CT011	FW TEMP AT HPH-8A I/L	TC-K	0-300	DEG C	0	1	1	1
186	NA	10LAB43CT011	20LAB43CT011	30LAB43CT011	FW TEMP AT HPH-9A I/L	TC-K	0-400	DEG C	0	1	1	1
187	NA	10LAB44CT011	20LAB44CT011	30LAB44CT011	FW TEMP BEF HPH-7A DES HTR	TC-K	0-400	DEG C	0	1	1	1
188	NA	10LAB45CT011	20LAB45CT011	30LAB45CT011	FW TEMP AFT HPH-7A DES HTR	TC-K	0-450	DEG C	0	1	1	1
189	NA	10LAB46CT011	20LAB46CT011	30LAB46CT011	FW TEMP AT HPH-7B I/L	RTD	0-250	DEG C	0	1	1	1
190	NA	10LAB47CT011	20LAB47CT011	30LAB47CT011	FW TEMP AT HPH-8B I/L	TC-K	0-300	DEG C	0	1	1	1
191	NA	10LAB48CT011	20LAB48CT011	30LAB48CT011	FW TEMP AT HPH-9B I/L	TC-K	0-400	DEG C	0	1	1	1
192	NA	10LAB49CT011	20LAB49CT011	30LAB49CT011	FW TEMP BEF HPH-7B DES HTR	TC-K	0-400	DEG C	0	1	1	1
193	NA	10LAB50CT011	20LAB50CT011	30LAB50CT011	FW TEMP AFT HPH-7B DES HTR	TC-K	0-400	DEG C	0	1	1	1
194	NA	10LAB60CT011	20LAB60CT011	30LAB60CT011	FW TEMP TO ECO	TC-K	0-450	DEG C	0	1	1	1
195	NA	10LAB60CT012	20LAB60CT012	30LAB60CT012	FW TEMP TO ECO	TC-K	0-450	DEG C	0	1	1	1
196	NA	10LCH10CT011	20LCH10CT011	30LCH10CT011	HPH-7A DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
197	NA	10LCH10CT012	20LCH10CT012	30LCH10CT012	HPH 7A DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
198	NA	10LCH15CT011	20LCH15CT011	30LCH15CT011	HPH 7A ALT DRN TEMP TO F/T-B	TC-K	0-300	DEG C	0	1	1	1
199	NA	10LCH15CT012	20LCH15CT012	30LCH15CT012	HPH 7A ALT DRN TEMP TO F/T-B (D/S OF CV)	TC-K	0-300	DEG C	0	1	1	1
200	NA	10LCH20CT011	20LCH20CT011	30LCH20CT011	HPH-7B DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
201	NA	10LCH20CT012	20LCH20CT012	30LCH20CT012	HPH 7B DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
202	NA	10LCH25CT011	20LCH25CT011	30LCH25CT011	HPH 7B ALT DRN TEMP TO F/T-B	TC-K	0-300	DEG C	0	1	1	1
203	NA	10LCH25CT012	20LCH25CT012	30LCH25CT012	HPH 7B ALT DRN TEMP TO F/T-B (D/S OF CV)	TC-K	0-300	DEG C	0	1	1	1
204	NA	10LCH30CT011	20LCH30CT011	30LCH30CT011	HPH 8A DRN TEMP TO HPH 7A	TC-K	0-300	DEG C	0	1	1	1
205	NA	10LCH30CT012	20LCH30CT012	30LCH30CT012	HPH 8A DRN TEMP TO HPH 7A	TC-K	0-300	DEG C	0	1	1	1
206	NA	10LCH35CT011	20LCH35CT011	30LCH35CT011	HPH 8A ALT DRN TEMP TO F/T-A	TC-K	0-350	DEG C	0	1	1	1
207	NA	10LCH35CT012	20LCH35CT012	30LCH35CT012	HPH 8A ALT DRN TEMP TO F/T-A (D/S OF CV) MTL TYPE	TC-K	0-350	DEG C	0	1	1	1
208	NA	10LCH40CT011	20LCH40CT011	30LCH40CT011	HPH 8B DRN TEMP TO HPH 7B	TC-K	0-300	DEG C	0	1	1	1
209	NA	10LCH40CT012	20LCH40CT012	30LCH40CT012	HPH 8B DRN TEMP TO HPH 7B	TC-K	0-300	DEG C	0	1	1	1
210	NA	10LCH45CT011	20LCH45CT011	30LCH45CT011	HPH 8B ALT DRN TEMP TO F/T-B	TC-K	0-350	DEG C	0	1	1	1
211	NA	10LCH45CT012	20LCH45CT012	30LCH45CT012	HPH 8B ALT DRN TEMP TO F/T-B (D/S OF CV)	TC-K	0-350	DEG C	0	1	1	1
212	NA	10LCH50CT011	20LCH50CT011	30LCH50CT011	HPH 9A DRN TEMP TO HPH 8A	TC-K	0-400	DEG C	0	1	1	1
213	NA	10LCH50CT012	20LCH50CT012	30LCH50CT012	HPH 9A DRN TEMP TO HPH 8A	TC-K	0-400	DEG C	0	1	1	1
214	NA	10LCH55CT011	20LCH55CT011	30LCH55CT011	HPH 9A ALT DRN TEMP TO F/T-A	TC-K	0-400	DEG C	0	1	1	1
215	NA	10LCH55CT012	20LCH55CT012	30LCH55CT012	HPH 9A ALT DRN TEMP TO F/T-A (D/S OF CV) MTL TYPE	TC-K	0-400	DEG C	0	1	1	1
216	NA	10LCH60CT011	20LCH60CT011	30LCH60CT011	HPH 9B DRN TEMP TO HPH 8B	TC-K	0-400	DEG C	0	1	1	1
217	NA	10LCH60CT012	20LCH60CT012	30LCH60CT012	HPH 9B DRN TEMP TO HPH 8B	TC-K	0-400	DEG C	0	1	1	1
218	NA	10LCH65CT011	20LCH65CT011	30LCH65CT011	HPH 9B ALT DRN TEMP TO F/T-B	TC-K	0-400	DEG C	0	1	1	1
219	NA	10LCH65CT012	20LCH65CT012	30LCH65CT012	HPH 9B ALT DRN TEMP TO F/T-B (D/S OF CV)	TC-K	0-400	DEG C	0	1	1	1
220	NA	10LCJ11CT011	20LCJ11CT011	30LCJ11CT011	DRN CLR O/L TEMP TO F/T-A	RTD	0-100	DEG C	0	1	1	1
221	NA	10LCJ20CT011	20LCJ20CT011	30LCJ20CT011	LPH 2 DRN TEMP TO LPH 1 (U/S OF CV)	RTD	0-120	DEG C	0	1	1	1
222	NA	10LCJ20CT012	20LCJ20CT012	30LCJ20CT012	LPH 2 DRN TEMP TO LPH 1 (D/S OF CV)	RTD	0-120	DEG C	0	1	1	1
223	NA	10LCJ21CT011	20LCJ21CT011	30LCJ21CT011	LPH 2 ALT DRN TEMP TO F/T-A (U/S OF CV)	RTD	0-150	DEG C	0	1	1	1
224	NA	10LCJ21CT012	20LCJ21CT012	30LCJ21CT012	LPH 2 ALT DRN TEMP TO F/T-A (D/S OF CV)	RTD	0-150	DEG C	0	1	1	1
225	NA	10LCJ30CT011	20LCJ30CT011	30LCJ30CT011	LPH 3 DRN TEMP TO DRIP PMP	RTD	0-150	DEG C	0	1	1	1
226	NA	10LCJ31CT011	20LCJ31CT011	30LCJ31CT011	LPH 3 ALT DRN TEMP TO F/T-A (U/S OF CV)	RTD	0-150	DEG C	0	1	1	1
227	NA	10LCJ31CT012	20LCJ31CT012	30LCJ31CT012	LPH 3 ALT DRN TEMP TO F/T-A (D/S OF CV)	RTD	0-150	DEG C	0	1	1	1
228	NA	10LCJ50CT011	20LCJ50CT011	30LCJ50CT011	LPH 5 DRN TEMP TO LPH 4 (U/S OF CV)	RTD	0-200	DEG C	0	1	1	1
229	NA	10LCJ50CT012	20LCJ50CT012	30LCJ50CT012	LPH 5 DRN TEMP TO LPH 4 (D/S OF CV)	RTD	0-200	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
230	NA	10LCJ40CT011	20LCJ40CT011	30LCJ40CT011	LPH 4 DRN TEMP TO LPH 3 (U/S OF CV)	RTD	0-200	DEG C	0	1	1	1
231	NA	10LCJ40CT012	20LCJ40CT012	30LCJ40CT012	LPH 4 DRN TEMP TO LPH 3 (D/S OF CV)	RTD	0-200	DEG C	0	1	1	1
232	NA	10LCJ51CT011	20LCJ51CT011	30LCJ51CT011	LPH 5 ALT DRN TEMP TO F/T-A (U/S OF CV)	RTD	0-250	DEG C	0	1	1	1
233	NA	10LCJ51CT012	20LCJ51CT012	30LCJ51CT012	LPH 5 ALT DRN TEMP TO F/T-A (D/S OF CV)	RTD	0-250	DEG C	0	1	1	1
234	NA	10LCJ41CT011	20LCJ41CT011	30LCJ41CT011	LPH 4 ALT DRN TEMP TO F/T-A (U/S OF CV)	RTD	0-200	DEG C	0	1	1	1
235	NA	10LCJ41CT012	20LCJ41CT012	30LCJ41CT012	LPH 4 ALT DRN TEMP TO F/T-A (D/S OF CV)	RTD	0-200	DEG C	0	1	1	1
236	NA	10LCM20CT020	20LCM20CT020	30LCM20CT020	FLASH TNK-A SHELL TEMP	TC-K	0-300	DEG C	0	1	1	1
237	NA	10LCM30CT030	20LCM30CT030	30LCM30CT030	FLASH TNK-B SHELL TEMP	TC-K	0-300	DEG C	0	1	1	1
238	NA	10LS-HD-01	20LS-HD-01	30LS-HD-01	HPH-7A DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
239	NA	10LS-HD-02	20LS-HD-02	30LS-HD-02	HPH-7A DRN TO DEA TEMP	TC-K	0-300	DEG C	0	1	1	1
240	NA	10LBF21CT013	20LBF21CT013	30LBF21CT013	HPBP-2 D/S MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
241	NA	10LBF11CT013	20LBF11CT013	30LBF11CT013	HPBP-1 D/S MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
242	NA	10LBF10CT011	20LBF10CT011	30LBF10CT011	HPBP-1 U/S TEMP	TC-K	0-700	DEG C	0	1	1	1
243	NA	10LBF20CT011	20LBF20CT011	30LBF20CT011	HPBP-2 U/S TEMP	TC-K	0-700	DEG C	0	1	1	1
244	NA	10LBF11CT011	20LBF11CT011	30LBF11CT011	HPBP-1 D/S TEMP	TC-K	0-500	DEG C	0	1	1	1
245	NA	10LBF11CT012	20LBF11CT012	30LBF11CT012	HPBP-1 D/S TEMP	TC-K	0-500	DEG C	0	1	1	1
246	NA	10LS-HP-03A	20LS-HP-03A	30LS-HP-03A	MS TO HPBP-2 TEMP AFTR FE	TC-K	0-700	DEG C	0	1	1	1
247	NA	10LS-HP-04A	20LS-HP-04A	30LS-HP-04A	MS TO HPBP-2 TEMP BEF FE	TC-K	0-700	DEG C	0	1	1	1
248	NA	10LS-HP-05A	20LS-HP-05A	30LS-HP-05A	MS TO HPBP-1 TEMP AFTR FE	TC-K	0-700	DEG C	0	1	1	1
249	NA	10LS-HP-06A	20LS-HP-06A	30LS-HP-06A	MS TO HPBP-1 TEMP BEF FE	TC-K	0-700	DEG C	0	1	1	1
250	NA	10LBF21CT011	20LBF21CT011	30LBF21CT011	HPBP-2 D/S TEMP	TC-K	0-500	DEG C	0	1	1	1
251	NA	10LBF21CT012	20LBF21CT012	30LBF21CT012	HPBP-2 D/S TEMP	TC-K	0-500	DEG C	0	1	1	1
252	NA	10LBA01CT011	20LBA01CT011	30LBA01CT011	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
253	NA	10LBA01CT012	20LBA01CT012	30LBA01CT012	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
254	NA	10LBA01CT013	20LBA01CT013	30LBA01CT013	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
255	NA	10LBA02CT011	20LBA02CT011	30LBA02CT011	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
256	NA	10LBA02CT012	20LBA02CT012	30LBA02CT012	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
257	NA	10LBA02CT013	20LBA02CT013	30LBA02CT013	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
258	NA	10LBA10CT011	20LBA10CT011	30LBA10CT011	MS HDR TEMP	TC-K	0-700	DEG C	0	1	1	1
259	NA	10LBA10CT012	20LBA10CT012	30LBA10CT012	MS HDR TEMP	TC-K	0-700	DEG C	0	1	1	1
260	NA	10LBA10CT013	20LBA10CT013	30LBA10CT013	MS HDR TEMP	TC-K	0-700	DEG C	0	1	1	1
261	NA	10LBB01CT011	20LBB01CT011	30LBB01CT011	HRH STM TEMP AT RH O/L - L	TC-K	0-700	DEG C	0	1	1	1
262	NA	10LBB01CT012	20LBB01CT012	30LBB01CT012	HRH STM TEMP AT RH O/L - L	TC-K	0-700	DEG C	0	1	1	1
263	NA	10LBB01CT013	20LBB01CT013	30LBB01CT013	HRH STM TEMP AT RH O/L - L	TC-K	0-700	DEG C	0	1	1	1
264	NA	10LBB02CT011	20LBB02CT011	30LBB02CT011	HRH STM TEMP AT RH O/L - R	TC-K	0-700	DEG C	0	1	1	1
265	NA	10LBB02CT012	20LBB02CT012	30LBB02CT012	HRH STM TEMP AT RH O/L - R	TC-K	0-700	DEG C	0	1	1	1
266	NA	10LBB02CT013	20LBB02CT013	30LBB02CT013	HRH STM TEMP AT RH O/L - R	TC-K	0-700	DEG C	0	1	1	1
267	NA	10LBC01CT011	20LBC01CT011	30LBC01CT011	CRH STM TEMP AT RH I/L-L	TC-K	0-500	DEG C	0	1	1	1
268	NA	10LBC02CT011	20LBC02CT011	30LBC02CT011	CRH STM TEMP AT RH I/L-R	TC-K	0-500	DEG C	0	1	1	1
269	NA	10LBB21CT011	20LBB21CT011	30LBB21CT011	HRH EQUALISING LINE TEMP	TC-K	0-700	DEG C	0	1	1	1
270	NA	10LBC10CT011	20LBC10CT011	30LBC10CT011	CRH STM HDR TEMP AFT NRV	TC-K	0-500	DEG C	0	1	1	1
271	NA	10LS-MS-09A	20LS-MS-09A	30LS-MS-09A	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
272	NA	10LS-MS-16A	20LS-MS-16A	30LS-MS-16A	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
273	NA	10LS-MS-10A	20LS-MS-10A	30LS-MS-10A	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
274	NA	10LS-MS-13A	20LS-MS-13A	30LS-MS-13A	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
275	NA	10LS-MS-08A	20LS-MS-08A	30LS-MS-08A	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
276	NA	10LS-MS-15A	20LS-MS-15A	30LS-MS-15A	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
277	NA	10LS-MS-14A	20LS-MS-14A	30LS-MS-14A	MS TEMP AT SH O/L-R	TC-K	0-700	DEG C	0	1	1	1
278	NA	10LS-MS-11A	20LS-MS-11A	30LS-MS-11A	MS TEMP AT SH O/L-L	TC-K	0-700	DEG C	0	1	1	1
279	NA	10LS-MS-33A	20LS-MS-33A	30LS-MS-33A	HPT O/L TEMP-R	TC-K	0-700	DEG C	0	1	1	1
280	NA	10LS-MS-18A	20LS-MS-18A	30LS-MS-18A	RH I/L HDR TEMP-L	TC-K	0-500	DEG C	0	1	1	1
281	NA	10LS-MS-21A	20LS-MS-21A	30LS-MS-21A	RH I/L HDR TEMP-R	TC-K	0-500	DEG C	0	1	1	1
282	NA	10LS-MS-19A	20LS-MS-19A	30LS-MS-19A	RH I/L HDR TEMP-L	TC-K	0-500	DEG C	0	1	1	1
283	NA	10LS-MS-20A	20LS-MS-20A	30LS-MS-20A	RH I/L HDR TEMP-R	TC-K	0-500	DEG C	0	1	1	1
284	NA	10LS-MS-23A	20LS-MS-23A	30LS-MS-23A	RH O/L HDR TEMP-L	TC-K	0-700	DEG C	0	1	1	1
285	NA	10LS-MS-24A	20LS-MS-24A	30LS-MS-24A	RH O/L HDR TEMP-L	TC-K	0-700	DEG C	0	1	1	1
286	NA	10LS-MS-25A	20LS-MS-25A	30LS-MS-25A	RH O/L HDR TEMP-L	TC-K	0-700	DEG C	0	1	1	1
287	NA	10LS-MS-27A	20LS-MS-27A	30LS-MS-27A	RH O/L HDR TEMP-R	TC-K	0-700	DEG C	0	1	1	1
288	NA	10LS-MS-28A	20LS-MS-28A	30LS-MS-28A	RH O/L HDR TEMP-R	TC-K	0-700	DEG C	0	1	1	1
289	NA	10LS-MS-29A	20LS-MS-29A	30LS-MS-29A	RH O/L HDR TEMP-R	TC-K	0-700	DEG C	0	1	1	1
290	NA	10LS-MS-30A	20LS-MS-30A	30LS-MS-30A	RH O/L HDR TEMP-R	TC-K	0-700	DEG C	0	1	1	1
291	NA	10LCM10CT010	20LCM10CT010	30LCM10CT010	UNIT FLASH TNK TEMP	TC-K	0-300	DEG C	0	1	1	1
292	NA	10LCM10CT011	20LCM10CT011	30LCM10CT011	MS W/U LN DRN TO UFT MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
293	NA	10LCM10CT012	20LCM10CT012	30LCM10CT012	MS W/U LN DRN TO UFT MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
294	NA	10LCM10CT013	20LCM10CT013	30LCM10CT013	MS LINE DRN TO UFT MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
295	NA	10LCM10CT014	20LCM10CT014	30LCM10CT014	MS LINE DRN TO UFT MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
296	NA	10LCM30CT011	20LCM30CT011	30LCM30CT011	EXT TO HPH-9 DRN MTL TEMP	TC-K	0-450	DEG C	0	1	1	1
297	NA	10LCM30CT014	20LCM30CT014	30LCM30CT014	EXT TO HPH-7A/B DESUP LN DRN MTL TEMP	TC-K	0-500	DEG C	0	1	1	1
298	NA	10LCM30CT015	20LCM30CT015	30LCM30CT015	HRH LN DRN TO FT-B MTL TEMP	TC-K	0-650	DEG C	0	1	1	1
299	NA	10LCM30CT018	20LCM30CT018	30LCM30CT018	HRH LN DRN TO FT-B MTL TEMP	TC-K	0-650	DEG C	0	1	1	1
300	NA	10LCM30CT016	20LCM30CT016	30LCM30CT016	IP SV W/U LN DRN TO FT-B MTL TEMP	TC-K	0-650	DEG C	0	1	1	1
301	NA	10LCM30CT017	20LCM30CT017	30LCM30CT017	IP SV W/U LN DRN TO FT-B MTL TEMP	TC-K	0-650	DEG C	0	1	1	1
302	NA	10LCM30CT020	20LCM30CT020	30LCM30CT020	CRH LN DRN TO FT-B MTL TEMP	TC-K	0-400	DEG C	0	1	1	1
303	NA	10MAW10CT010	20MAW10CT010	30MAW10CT010	TURB GLND SEAL LN DRN MTL TEMP	TC-K	0-400	DEG C	0	1	1	1
304	NA	10LCM20CT012	20LCM20CT012	30LCM20CT012	AUX STM TO BFPT LINE DRN TEMP	TC-K	0-400	DEG C	0	1	1	1
305	NA	10LBG10CT015	20LBG10CT015	30LBG10CT015	HCPRDS U/S OF CV DRN TO UFT TEMP	TC-K	0-500	DEG C	0	1	1	1
306	NA	10LBG10CT016	20LBG10CT016	30LBG10CT016	LCPRDS U/S OF CV DRN TO UFT TEMP	TC-K	0-500	DEG C	0	1	1	1
307	NA	10LCM20CT011	20LCM20CT011	30LCM20CT011	CRH TO BFPT LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
308	NA	10LCM20CT013	20LCM20CT013	30LCM20CT013	EXT TO BFPT-A LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
309	NA	10LCM20CT014	20LCM20CT014	30LCM20CT014	EXT TO DEA LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
310	NA	10LCM20CT015	20LCM20CT015	30LCM20CT015	EXT TO BFPT-A&B LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
311	NA	10LCM20CT016	20LCM20CT016	30LCM20CT016	CRH TO DEA PEGGING OF CS LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
312	NA	10LCM30CT013	20LCM30CT013	30LCM30CT013	EXT TO BFPT-B LINE DRN TEMP	TC-K	0-500	DEG C	0	1	1	1
313	NA	10HFE01CT035	20HFE01CT035	30HFE01CT035	PA FAN-A I/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
314	NA	10HFE05CT035	20HFE05CT035	30HFE05CT035	PA FAN-B I/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
315	NA	10HFE02CT001	20HFE02CT001	30HFE02CT001	PA FAN-A O/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
316	NA	10HFE06CT001	20HFE06CT001	30HFE06CT001	PA FAN-B O/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
317	NA	10HFE04CT001	20HFE04CT001	30HFE04CT001	APH-A HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
318	NA	10HFE04CT002	20HFE04CT002	30HFE04CT002	APH-A HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
319	NA	10HFE04CT003	20HFE04CT003	30HFE04CT003	APH-A HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
320	NA	10HFE04CT004	20HFE04CT004	30HFE04CT004	APH-A HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
321	NA	10HFE08CT001	20HFE08CT001	30HFE08CT001	APH-B HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
322	NA	10HFE08CT002	20HFE08CT002	30HFE08CT002	APH-B HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
323	NA	10HFE08CT003	20HFE08CT003	30HFE08CT003	APH-B HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
324	NA	10HFE08CT004	20HFE08CT004	30HFE08CT004	APH-B HOT PA TEMP	TC-K	0-500	DEG C	0	1	1	1
325	NA	10HLA11CT001	20HLA11CT001	30HLA11CT001	FD FAN-A I/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
326	NA	10HLA21CT001	20HLA21CT001	30HLA21CT001	FD FAN-B I/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
327	NA	10HLA12CT001	20HLA12CT001	30HLA12CT001	FD FAN-A O/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
328	NA	10HLA22CT001	20HLA22CT001	30HLA22CT001	FD FAN-B O/L AIR TEMP	RTD	0-75	DEG C	0	1	1	1
329	NA	10HLA13CT010	20HLA13CT010	30HLA13CT010	APH-A I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
330	NA	10HLA13CT011	20HLA13CT011	30HLA13CT011	APH-A I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
331	NA	10HLA13CT012	20HLA13CT012	30HLA13CT012	APH-A I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
332	NA	10HLA13CT013	20HLA13CT013	30HLA13CT013	APH-A I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
333	NA	10HLA23CT010	20HLA23CT010	30HLA23CT010	APH-B I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
334	NA	10HLA23CT011	20HLA23CT011	30HLA23CT011	APH-B I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
335	NA	10HLA23CT012	20HLA23CT012	30HLA23CT012	APH-B I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
336	NA	10HLA23CT013	20HLA23CT013	30HLA23CT013	APH-B I/L COLD SA TEMP	RTD	0-75	DEG C	0	1	1	1
337	NA	10HLA14CT001	20HLA14CT001	30HLA14CT001	APH-A O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
338	NA	10HLA14CT002	20HLA14CT002	30HLA14CT002	APH-A O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
339	NA	10HLA14CT003	20HLA14CT003	30HLA14CT003	APH-A O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
340	NA	10HLA14CT004	20HLA14CT004	30HLA14CT004	APH-A O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
341	NA	10HLA24CT001	20HLA24CT001	30HLA24CT001	APH-B O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
342	NA	10HLA24CT002	20HLA24CT002	30HLA24CT002	APH-B O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
343	NA	10HLA24CT003	20HLA24CT003	30HLA24CT003	APH-B O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
344	NA	10HLA24CT004	20HLA24CT004	30HLA24CT004	APH-B O/L HOT SA TEMP	TC-K	0-500	DEG C	0	1	1	1
345	NA	10HLA15CT001	20HLA15CT001	30HLA15CT001	HOT SA TEMP FROM APH-A	TC-K	0-500	DEG C	0	1	1	1
346	NA	10HLA15CT002	20HLA15CT002	30HLA15CT002	HOT SA TEMP FROM APH-A	TC-K	0-500	DEG C	0	1	1	1
347	NA	10HLA25CT001	20HLA25CT001	30HLA25CT001	HOT SA TEMP FROM APH-B	TC-K	0-500	DEG C	0	1	1	1
348	NA	10HLA25CT002	20HLA25CT002	30HLA25CT002	HOT SA TEMP FROM APH-B	TC-K	0-500	DEG C	0	1	1	1
349	NA	10HBK10CT002	20HBK10CT002	30HBK10CT002	BEF RER PLTN SH FG TEMP	TC-R	0-1800	DEG C	0	1	1	1
350	NA	10HBK30CT002	20HBK30CT002	30HBK30CT002	BEF RER PLTN SH FG TEMP	TC-R	0-1800	DEG C	0	1	1	1
351	NA	10HBK10CT003	20HBK10CT003	30HBK10CT003	FINISH RH I/L FG TEMP	TC-R	0-1600	DEG C	0	1	1	1
352	NA	10HBK30CT003	20HBK30CT003	30HBK30CT003	FINISH RH I/L FG TEMP	TC-R	0-1600	DEG C	0	1	1	1
353	NA	10HBK10CT004	20HBK10CT004	30HBK10CT004	FINISH SH I/L FG TEMP	TC-R	0-1500	DEG C	0	1	1	1
354	NA	10HBK30CT004	20HBK30CT004	30HBK30CT004	FINISH SH I/L FG TEMP	TC-R	0-1500	DEG C	0	1	1	1
355	NA	10HBK10CT005	20HBK10CT005	30HBK10CT005	LTRH I/L FG TEMP	TC-R	0-1200	DEG C	0	1	1	1
356	NA	10HBK30CT005	20HBK30CT005	30HBK30CT005	LTRH I/L FG TEMP	TC-R	0-1200	DEG C	0	1	1	1
357	NA	10HBK10CT007	20HBK10CT007	30HBK10CT007	ECON INTERMEDIATE BANK FLUE GAS	TC-K	0-600	DEG C	0	1	1	1
358	NA	10HBK30CT007	20HBK30CT007	30HBK30CT007	ECON INTERMEDIATE BANK FLUE GAS	TC-K	0-600	DEG C	0	1	1	1
359	NA	10HBK10CT006	20HBK10CT006	30HBK10CT006	ECON I/L FG TEMP	TC-R	0-1000	DEG C	0	1	1	1
360	NA	10HBK30CT006	20HBK30CT006	30HBK30CT006	ECON I/L FG TEMP	TC-R	0-1000	DEG C	0	1	1	1
361	NA	10HBK10CT008	20HBK10CT008	30HBK10CT008	ECON O/L FG TEMP	TC-K	0-600	DEG C	0	1	1	1
362	NA	10HBK30CT008	20HBK30CT008	30HBK30CT008	ECON O/L FG TEMP	TC-K	0-600	DEG C	0	1	1	1
363	NA	10HNA31CT001	20HNA31CT001	30HNA31CT001	APH-A FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
364	NA	10HNA31CT002	20HNA31CT002	30HNA31CT002	APH-A FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
365	NA	10HNA31CT003	20HNA31CT003	30HNA31CT003	APH-A FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
366	NA	10HNA31CT004	20HNA31CT004	30HNA31CT004	APH-A FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
367	NA	10HNA41CT001	20HNA41CT001	30HNA41CT001	APH-B FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
368	NA	10HNA41CT002	20HNA41CT002	30HNA41CT002	APH-B FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
369	NA	10HNA41CT003	20HNA41CT003	30HNA41CT003	APH-B FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
370	NA	10HNA41CT004	20HNA41CT004	30HNA41CT004	APH-B FG I/L TEMP	TC-K	0-600	DEG C	0	1	1	1
371	NA	10HNA32CT001	20HNA32CT001	30HNA32CT001	APH-A FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
372	NA	10HNA32CT002	20HNA32CT002	30HNA32CT002	APH-A FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
373	NA	10HNA32CT003	20HNA32CT003	30HNA32CT003	APH-A FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
374	NA	10HNA32CT004	20HNA32CT004	30HNA32CT004	APH-A FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
375	NA	10HNA42CT001	20HNA42CT001	30HNA42CT001	APH-B FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
376	NA	10HNA42CT002	20HNA42CT002	30HNA42CT002	APH-B FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
377	NA	10HNA42CT003	20HNA42CT003	30HNA42CT003	APH-B FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
378	NA	10HNA42CT004	20HNA42CT004	30HNA42CT004	APH-B FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
379	NA	10HNC11CT001	20HNC11CT001	30HNC11CT001	ID FAN-A COLD FG I/L TEMP	RTD	0-200	DEG C	0	1	1	1
380	NA	10HNC21CT001	20HNC21CT001	30HNC21CT001	ID FAN-B COLD FG I/L TEMP	RTD	0-200	DEG C	0	1	1	1
381	NA	10HNC12CT001	20HNC12CT001	30HNC12CT001	ID FAN-A COLD FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
382	NA	10HNC22CT001	20HNC22CT001	30HNC22CT001	ID FAN-B COLD FG O/L TEMP	RTD	0-200	DEG C	0	1	1	1
383	NA	10HJF54CT001	20HJF54CT001	30HJF54CT001	HEAVY OIL RETURN LINE TEMPERATURE	RTD	0-200	DEG C	0	1	1	1
384	NA	10HJM20CT001	20HJM20CT001	30HJM20CT001	ATOM. STEAM HDR TEMPERATURE	RTD	0-400	DEG C	0	1	1	1
385	NA	10HJF91CT001	20HJF91CT001	30HJF91CT001	DRN OIL TNK TEMP (BLR AREA)	RTD	0-120	DEG C	0	1	1	1
386	NA	10HJF91CT002	20HJF91CT002	30HJF91CT002	DRN OIL TNK TEMP (BLR AREA)	RTD	0-120	DEG C	0	1	1	1
387	NA	10HFC10CT003	20HFC10CT003	30HFC10CT003	MILL-A O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
388	NA	10HFC10CT004	20HFC10CT004	30HFC10CT004	MILL-A O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
389	NA	10HFC20CT003	20HFC20CT003	30HFC20CT003	MILL-B O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
390	NA	10HFC20CT004	20HFC20CT004	30HFC20CT004	MILL-B O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
391	NA	10HFC30CT003	20HFC30CT003	30HFC30CT003	MILL-C O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
392	NA	10HFC30CT004	20HFC30CT004	30HFC30CT004	MILL-C O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
393	NA	10HFC40CT003	20HFC40CT003	30HFC40CT003	MILL-D O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
394	NA	10HFC40CT004	20HFC40CT004	30HFC40CT004	MILL-D O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
395	NA	10HFC50CT003	20HFC50CT003	30HFC50CT003	MILL-E O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
396	NA	10HFC50CT004	20HFC50CT004	30HFC50CT004	MILL-E O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
397	NA	10HFC60CT003	20HFC60CT003	30HFC60CT003	MILL-F O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
398	NA	10HFC60CT004	20HFC60CT004	30HFC60CT004	MILL-F O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
399	NA	10HFC70CT003	20HFC70CT003	30HFC70CT003	MILL-G O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
400	NA	10HFC70CT004	20HFC70CT004	30HFC70CT004	MILL-G O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
401	NA	10HFC80CT003	20HFC80CT003	30HFC80CT003	MILL-H O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
402	NA	10HFC80CT004	20HFC80CT004	30HFC80CT004	MILL-H O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
403	NA	10HFC90CT003	20HFC90CT003	30HFC90CT003	MILL-J O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
404	NA	10HFC90CT004	20HFC90CT004	30HFC90CT004	MILL-J O/L TEMP	TC-K	0-300	DEG C	0	1	1	1
405	NA	10HFE15CT001	20HFE15CT001	30HFE15CT001	COLD PA TO PULV TEMP	RTD	0-100	DEG C	0	1	1	1
406	NA	10HFE17CT001	20HFE17CT001	30HFE17CT001	MILL-A PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
407	NA	10HFE17CT002	20HFE17CT002	30HFE17CT002	MILL-A PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
408	NA	10HFE27CT001	20HFE27CT001	30HFE27CT001	MILL-B PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
409	NA	10HFE27CT002	20HFE27CT002	30HFE27CT002	MILL-B PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
410	NA	10HFE37CT001	20HFE37CT001	30HFE37CT001	MILL-C PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
411	NA	10HFE37CT002	20HFE37CT002	30HFE37CT002	MILL-C PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
412	NA	10HFE47CT001	20HFE47CT001	30HFE47CT001	MILL-D PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
413	NA	10HFE47CT002	20HFE47CT002	30HFE47CT002	MILL-D PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
414	NA	10HFE57CT001	20HFE57CT001	30HFE57CT001	MILL-E PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
415	NA	10HFE57CT002	20HFE57CT002	30HFE57CT002	MILL-E PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
416	NA	10HFE67CT001	20HFE67CT001	30HFE67CT001	MILL-F PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
417	NA	10HFE67CT002	20HFE67CT002	30HFE67CT002	MILL-F PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
418	NA	10HFE77CT001	20HFE77CT001	30HFE77CT001	MILL-G PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
419	NA	10HFE77CT002	20HFE77CT002	30HFE77CT002	MILL-G PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
420	NA	10HFE87CT001	20HFE87CT001	30HFE87CT001	MILL-H PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
421	NA	10HFE87CT002	20HFE87CT002	30HFE87CT002	MILL-H PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
422	NA	10HFE97CT001	20HFE97CT001	30HFE97CT001	MILL-J PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
423	NA	10HFE97CT002	20HFE97CT002	30HFE97CT002	MILL-J PA I/L TEMP	TC-K	0-500	DEG C	0	1	1	1
424	NA	10LCJ30CT107	NA	NA	DRIP PMP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
425	NA	10LCJ30CT108	NA	NA	DRIP PMP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
426	NA	10LCJ30CT109	NA	NA	DRIP PMP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
427	NA	10LCJ30CT110	NA	NA	DRIP PMP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
428	NA	10LCJ30CT111	NA	NA	DRIP PMP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
429	NA	10LCJ30CT112	NA	NA	DRIP PMP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
430	NA	10LCJ30CT113	NA	NA	DRIP PMP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
431	NA	10LCJ30CT114	NA	NA	DRIP PMP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
432	NA	10LCJ30CT115	NA	NA	DRIP PMP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
433	NA	10LCJ30CT122	NA	NA	DRIP PMP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
434	NA	10LCJ30CT123	NA	NA	DRIP PMP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
435	NA	10LCJ30CT124	NA	NA	DRIP PMP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	0	0
436	NA	10LCJ30CT125	NA	NA	DRIP PMP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
437	NA	10LCJ30CT126	NA	NA	DRIP PMP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
438	NA	10LCJ30CT127	NA	NA	DRIP PMP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	0	0
439	NA	10LCJ30CT128	NA	NA	DRIP PMP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
440	NA	10LCJ30CT129	NA	NA	DRIP PMP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
441	NA	10LCJ30CT130	NA	NA	DRIP PMP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	0	0
442	NA	10LCB01CT107	20LCB01CT107	30LCB01CT107	CEP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
443	NA	10LCB01CT108	20LCB01CT108	30LCB01CT108	CEP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
444	NA	10LCB01CT109	20LCB01CT109	30LCB01CT109	CEP-A MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
445	NA	10LCB01CT110	20LCB01CT110	30LCB01CT110	CEP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
446	NA	10LCB01CT111	20LCB01CT111	30LCB01CT111	CEP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
447	NA	10LCB01CT112	20LCB01CT112	30LCB01CT112	CEP-A MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
448	NA	10LCB01CT113	20LCB01CT113	30LCB01CT113	CEP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
449	NA	10LCB01CT114	20LCB01CT114	30LCB01CT114	CEP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
450	NA	10LCB01CT115	20LCB01CT115	30LCB01CT115	CEP-A MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
451	NA	10LCB02CT107	20LCB02CT107	30LCB02CT107	CEP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
452	NA	10LCB02CT108	20LCB02CT108	30LCB02CT108	CEP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
453	NA	10LCB02CT109	20LCB02CT109	30LCB02CT109	CEP-B MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
454	NA	10LCB02CT110	20LCB02CT110	30LCB02CT110	CEP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
455	NA	10LCB02CT111	20LCB02CT111	30LCB02CT111	CEP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
456	NA	10LCB02CT112	20LCB02CT112	30LCB02CT112	CEP-B MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
457	NA	10LCB02CT113	20LCB02CT113	30LCB02CT113	CEP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
458	NA	10LCB02CT114	20LCB02CT114	30LCB02CT114	CEP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
459	NA	10LCB02CT115	20LCB02CT115	30LCB02CT115	CEP-B MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
460	NA	10LCB03CT107	20LCB03CT107	30LCB03CT107	CEP-C MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
461	NA	10LCB03CT108	20LCB03CT108	30LCB03CT108	CEP-C MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
462	NA	10LCB03CT109	20LCB03CT109	30LCB03CT109	CEP-C MTR WNDG TEMP R-PHASE	RTD	0-200	DEG C	0	1	1	1
463	NA	10LCB03CT110	20LCB03CT110	30LCB03CT110	CEP-C MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
464	NA	10LCB03CT111	20LCB03CT111	30LCB03CT111	CEP-C MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
465	NA	10LCB03CT112	20LCB03CT112	30LCB03CT112	CEP-C MTR WNDG TEMP Y-PHASE	RTD	0-200	DEG C	0	1	1	1
466	NA	10LCB03CT113	20LCB03CT113	30LCB03CT113	CEP-C MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
467	NA	10LCB03CT114	20LCB03CT114	30LCB03CT114	CEP-C MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
468	NA	10LCB03CT115	20LCB03CT115	30LCB03CT115	CEP-C MTR WNDG TEMP B-PHASE	RTD	0-200	DEG C	0	1	1	1
469	NA	10HFE01CT017	20HFE01CT017	30HFE01CT017	PA FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
470	NA	10HFE01CT018	20HFE01CT018	30HFE01CT018	PA FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
471	NA	10HFE01CT015	20HFE01CT015	30HFE01CT015	PA FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
472	NA	10HFE01CT016	20HFE01CT016	30HFE01CT016	PA FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
473	NA	10HFE01CT013	20HFE01CT013	30HFE01CT013	PA FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
474	NA	10HFE01CT014	20HFE01CT014	30HFE01CT014	PA FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
475	NA	10HFE01CT023	20HFE01CT023	30HFE01CT023	PA FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
476	NA	10HFE01CT021	20HFE01CT021	30HFE01CT021	PA FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
477	NA	10HFE01CT019	20HFE01CT019	30HFE01CT019	PA FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
478	NA	10HFE05CT017	20HFE05CT017	30HFE05CT017	PA FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
479	NA	10HFE05CT018	20HFE05CT018	30HFE05CT018	PA FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
480	NA	10HFE05CT015	20HFE05CT015	30HFE05CT015	PA FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
481	NA	10HFE05CT016	20HFE05CT016	30HFE05CT016	PA FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
482	NA	10HFE05CT013	20HFE05CT013	30HFE05CT013	PA FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
483	NA	10HFE05CT014	20HFE05CT014	30HFE05CT014	PA FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
484	NA	10HFE05CT023	20HFE05CT023	30HFE05CT023	PA FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
485	NA	10HFE05CT021	20HFE05CT021	30HFE05CT021	PA FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
486	NA	10HFE05CT019	20HFE05CT019	30HFE05CT019	PA FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
487	NA	10HLB10CT013	20HLB10CT013	30HLB10CT013	FD FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
488	NA	10HLB10CT014	20HLB10CT014	30HLB10CT014	FD FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
489	NA	10HLB10CT015	20HLB10CT015	30HLB10CT015	FD FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
490	NA	10HLB10CT016	20HLB10CT016	30HLB10CT016	FD FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
491	NA	10HLB10CT017	20HLB10CT017	30HLB10CT017	FD FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
492	NA	10HLB10CT018	20HLB10CT018	30HLB10CT018	FD FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
493	NA	10HLB10CT019	20HLB10CT019	30HLB10CT019	FD FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
494	NA	10HLB10CT021	20HLB10CT021	30HLB10CT021	FD FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
495	NA	10HLB10CT023	20HLB10CT023	30HLB10CT023	FD FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
496	NA	10HLB20CT013	20HLB20CT013	30HLB20CT013	FD FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
497	NA	10HLB20CT014	20HLB20CT014	30HLB20CT014	FD FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
498	NA	10HLB20CT015	20HLB20CT015	30HLB20CT015	FD FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
499	NA	10HLB20CT016	20HLB20CT016	30HLB20CT016	FD FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
500	NA	10HLB20CT017	20HLB20CT017	30HLB20CT017	FD FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
501	NA	10HLB20CT018	20HLB20CT018	30HLB20CT018	FD FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
502	NA	10HLB20CT019	20HLB20CT019	30HLB20CT019	FD FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
503	NA	10HLB20CT021	20HLB20CT021	30HLB20CT021	FD FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
504	NA	10HLB20CT023	20HLB20CT023	30HLB20CT023	FD FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
505	NA	10HNC10CT013	20HNC10CT013	30HNC10CT013	ID FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
506	NA	10HNC10CT014	20HNC10CT014	30HNC10CT014	ID FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
507	NA	10HNC10CT015	20HNC10CT015	30HNC10CT015	ID FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
508	NA	10HNC10CT016	20HNC10CT016	30HNC10CT016	ID FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
509	NA	10HNC10CT017	20HNC10CT017	30HNC10CT017	ID FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
510	NA	10HNC10CT018	20HNC10CT018	30HNC10CT018	ID FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
511	NA	10HNC10CT019	20HNC10CT019	30HNC10CT019	ID FAN-A MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
512	NA	10HNC10CT021	20HNC10CT021	30HNC10CT021	ID FAN-A MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
513	NA	10HNC10CT023	20HNC10CT023	30HNC10CT023	ID FAN-A MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
514	NA	10HNC20CT013	20HNC20CT013	30HNC20CT013	ID FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
515	NA	10HNC20CT014	20HNC20CT014	30HNC20CT014	ID FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
516	NA	10HNC20CT015	20HNC20CT015	30HNC20CT015	ID FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
517	NA	10HNC20CT016	20HNC20CT016	30HNC20CT016	ID FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
518	NA	10HNC20CT017	20HNC20CT017	30HNC20CT017	ID FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
519	NA	10HNC20CT018	20HNC20CT018	30HNC20CT018	ID FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
520	NA	10HNC20CT019	20HNC20CT019	30HNC20CT019	ID FAN-B MTR WNDG TEMP (B-PHASE)	RTD	0-150	DEG C	0	1	1	1
521	NA	10HNC20CT021	20HNC20CT021	30HNC20CT021	ID FAN-B MTR WNDG TEMP (Y-PHASE)	RTD	0-150	DEG C	0	1	1	1
522	NA	10HNC20CT023	20HNC20CT023	30HNC20CT023	ID FAN-B MTR WNDG TEMP (R-PHASE)	RTD	0-150	DEG C	0	1	1	1
523	NA	10HFC10CT001	20HFC10CT001	30HFC10CT001	PULV "A" OUTLET	TC-K	0-300	DEG C	0	1	1	1
524	NA	10HFC10CT002	20HFC10CT002	30HFC10CT002	PULV "A" OUTLET	TC-K	0-300	DEG C	0	1	1	1
525	NA	10HFC20CT001	20HFC20CT001	30HFC20CT001	PULV "B" OUTLET	TC-K	0-300	DEG C	0	1	1	1
526	NA	10HFC20CT002	20HFC20CT002	30HFC20CT002	PULV "B" OUTLET	TC-K	0-300	DEG C	0	1	1	1
527	NA	10HFC30CT001	20HFC30CT001	30HFC30CT001	PULV "C" OUTLET	TC-K	0-300	DEG C	0	1	1	1
528	NA	10HFC30CT002	20HFC30CT002	30HFC30CT002	PULV "C" OUTLET	TC-K	0-300	DEG C	0	1	1	1
529	NA	10HFC40CT001	20HFC40CT001	30HFC40CT001	PULV "D" OUTLET	TC-K	0-300	DEG C	0	1	1	1
530	NA	10HFC40CT002	20HFC40CT002	30HFC40CT002	PULV "D" OUTLET	TC-K	0-300	DEG C	0	1	1	1
531	NA	10HFC50CT001	20HFC50CT001	30HFC50CT001	PULV "E" OUTLET	TC-K	0-300	DEG C	0	1	1	1
532	NA	10HFC50CT002	20HFC50CT002	30HFC50CT002	PULV "E" OUTLET	TC-K	0-300	DEG C	0	1	1	1
533	NA	10HFC60CT001	20HFC60CT001	30HFC60CT001	PULV "F" OUTLET	TC-K	0-300	DEG C	0	1	1	1
534	NA	10HFC60CT002	20HFC60CT002	30HFC60CT002	PULV "F" OUTLET	TC-K	0-300	DEG C	0	1	1	1
535	NA	10HFC70CT001	20HFC70CT001	30HFC70CT001	PULV "G" OUTLET	TC-K	0-300	DEG C	0	1	1	1
536	NA	10HFC70CT002	20HFC70CT002	30HFC70CT002	PULV "G" OUTLET	TC-K	0-300	DEG C	0	1	1	1
537	NA	10HFC80CT001	20HFC80CT001	30HFC80CT001	PULV "H" OUTLET	TC-K	0-300	DEG C	0	1	1	1
538	NA	10HFC80CT002	20HFC80CT002	30HFC80CT002	PULV "H" OUTLET	TC-K	0-300	DEG C	0	1	1	1
539	NA	10HFC90CT001	20HFC90CT001	30HFC90CT001	PULV "J" OUTLET	TC-K	0-300	DEG C	0	1	1	1
540	NA	10HFC90CT002	20HFC90CT002	30HFC90CT002	PULV "J" OUTLET	TC-K	0-300	DEG C	0	1	1	1
541	NA	10HFC10CT023	20HFC10CT023	30HFC10CT023	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
542	NA	10HFC10CT024	20HFC10CT024	30HFC10CT024	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
543	NA	10HFC10CT030	20HFC10CT030	30HFC10CT030	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
544	NA	10HFC10CT025	20HFC10CT025	30HFC10CT025	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
545	NA	10HFC10CT026	20HFC10CT026	30HFC10CT026	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
546	NA	10HFC10CT032	20HFC10CT032	30HFC10CT032	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
547	NA	10HFC10CT027	20HFC10CT027	30HFC10CT027	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
548	NA	10HFC10CT028	20HFC10CT028	30HFC10CT028	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
549	NA	10HFC10CT034	20HFC10CT034	30HFC10CT034	PULV "A" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
550	NA	10HFC20CT023	20HFC20CT023	30HFC20CT023	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
551	NA	10HFC20CT024	20HFC20CT024	30HFC20CT024	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
552	NA	10HFC20CT030	20HFC20CT030	30HFC20CT030	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
553	NA	10HFC20CT025	20HFC20CT025	30HFC20CT025	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
554	NA	10HFC20CT026	20HFC20CT026	30HFC20CT026	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
555	NA	10HFC20CT032	20HFC20CT032	30HFC20CT032	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
556	NA	10HFC20CT027	20HFC20CT027	30HFC20CT027	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
557	NA	10HFC20CT028	20HFC20CT028	30HFC20CT028	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
558	NA	10HFC20CT034	20HFC20CT034	30HFC20CT034	PULV "B" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
559	NA	10HFC30CT023	20HFC30CT023	30HFC30CT023	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
560	NA	10HFC30CT024	20HFC30CT024	30HFC30CT024	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
561	NA	10HFC30CT030	20HFC30CT030	30HFC30CT030	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
562	NA	10HFC30CT025	20HFC30CT025	30HFC30CT025	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
563	NA	10HFC30CT026	20HFC30CT026	30HFC30CT026	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
564	NA	10HFC30CT032	20HFC30CT032	30HFC30CT032	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
565	NA	10HFC30CT027	20HFC30CT027	30HFC30CT027	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
566	NA	10HFC30CT028	20HFC30CT028	30HFC30CT028	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
567	NA	10HFC30CT034	20HFC30CT034	30HFC30CT034	PULV "C" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
568	NA	10HFC40CT023	20HFC40CT023	30HFC40CT023	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
569	NA	10HFC40CT024	20HFC40CT024	30HFC40CT024	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
570	NA	10HFC40CT030	20HFC40CT030	30HFC40CT030	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
571	NA	10HFC40CT025	20HFC40CT025	30HFC40CT025	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
572	NA	10HFC40CT026	20HFC40CT026	30HFC40CT026	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
573	NA	10HFC40CT032	20HFC40CT032	30HFC40CT032	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
574	NA	10HFC40CT027	20HFC40CT027	30HFC40CT027	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
575	NA	10HFC40CT028	20HFC40CT028	30HFC40CT028	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
576	NA	10HFC40CT034	20HFC40CT034	30HFC40CT034	PULV "D" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
577	NA	10HFC50CT023	20HFC50CT023	30HFC50CT023	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
578	NA	10HFC50CT024	20HFC50CT024	30HFC50CT024	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
579	NA	10HFC50CT030	20HFC50CT030	30HFC50CT030	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
580	NA	10HFC50CT025	20HFC50CT025	30HFC50CT025	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
581	NA	10HFC50CT026	20HFC50CT026	30HFC50CT026	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
582	NA	10HFC50CT032	20HFC50CT032	30HFC50CT032	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
583	NA	10HFC50CT027	20HFC50CT027	30HFC50CT027	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
584	NA	10HFC50CT028	20HFC50CT028	30HFC50CT028	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
585	NA	10HFC50CT034	20HFC50CT034	30HFC50CT034	PULV "E" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
586	NA	10HFC60CT023	20HFC60CT023	30HFC60CT023	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
587	NA	10HFC60CT024	20HFC60CT024	30HFC60CT024	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
588	NA	10HFC60CT030	20HFC60CT030	30HFC60CT030	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
589	NA	10HFC60CT025	20HFC60CT025	30HFC60CT025	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
590	NA	10HFC60CT026	20HFC60CT026	30HFC60CT026	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
591	NA	10HFC60CT032	20HFC60CT032	30HFC60CT032	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
592	NA	10HFC60CT027	20HFC60CT027	30HFC60CT027	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
593	NA	10HFC60CT028	20HFC60CT028	30HFC60CT028	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
594	NA	10HFC60CT034	20HFC60CT034	30HFC60CT034	PULV "F" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
595	NA	10HFC70CT023	20HFC70CT023	30HFC70CT023	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
596	NA	10HFC70CT024	20HFC70CT024	30HFC70CT024	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
597	NA	10HFC70CT030	20HFC70CT030	30HFC70CT030	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
598	NA	10HFC70CT025	20HFC70CT025	30HFC70CT025	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
599	NA	10HFC70CT026	20HFC70CT026	30HFC70CT026	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
600	NA	10HFC70CT032	20HFC70CT032	30HFC70CT032	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
601	NA	10HFC70CT027	20HFC70CT027	30HFC70CT027	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
602	NA	10HFC70CT028	20HFC70CT028	30HFC70CT028	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
603	NA	10HFC70CT034	20HFC70CT034	30HFC70CT034	PULV "G" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
604	NA	10HFC80CT023	20HFC80CT023	30HFC80CT023	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
605	NA	10HFC80CT024	20HFC80CT024	30HFC80CT024	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
606	NA	10HFC80CT030	20HFC80CT030	30HFC80CT030	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
607	NA	10HFC80CT025	20HFC80CT025	30HFC80CT025	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
608	NA	10HFC80CT026	20HFC80CT026	30HFC80CT026	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
609	NA	10HFC80CT032	20HFC80CT032	30HFC80CT032	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
610	NA	10HFC80CT027	20HFC80CT027	30HFC80CT027	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
611	NA	10HFC80CT028	20HFC80CT028	30HFC80CT028	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
612	NA	10HFC80CT034	20HFC80CT034	30HFC80CT034	PULV "H" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
613	NA	10HFC90CT023	20HFC90CT023	30HFC90CT023	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
614	NA	10HFC90CT024	20HFC90CT024	30HFC90CT024	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
615	NA	10HFC90CT030	20HFC90CT030	30HFC90CT030	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
616	NA	10HFC90CT025	20HFC90CT025	30HFC90CT025	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
617	NA	10HFC90CT026	20HFC90CT026	30HFC90CT026	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
618	NA	10HFC90CT032	20HFC90CT032	30HFC90CT032	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
619	NA	10HFC90CT027	20HFC90CT027	30HFC90CT027	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
620	NA	10HFC90CT028	20HFC90CT028	30HFC90CT028	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
621	NA	10HFC90CT034	20HFC90CT034	30HFC90CT034	PULV "J" MOTOR WINDING	RTD	0-100	DEG C	0	1	1	1
622	NA	10HCB01CT001	20HCB01CT001	30HCB01CT001	SB STM SUPPLY (AFTER PRV)	TC-K	0-500	DEG C	0	1	1	1
623	NA	10HCB30CT001	20HCB30CT001	30HCB30CT001	SB CNDS (LRSB DRAIN LINE-RIGHT)	TC-K	0-500	DEG C	0	1	1	1
624	NA	10HCB30CT002	20HCB30CT002	30HCB30CT002	SB CNDS (LRSB DRAIN LINE-RIGHT)	TC-K	0-500	DEG C	0	1	1	1
625	NA	10HCB10CT001	20HCB10CT001	30HCB10CT001	SB CNDS (LRSB DRAIN LINE-LEFT)	TC-K	0-500	DEG C	0	1	1	1
626	NA	10HCB10CT002	20HCB10CT002	30HCB10CT002	SB CNDS (LRSB DRAIN LINE-LEFT)	TC-K	0-500	DEG C	0	1	1	1
627	NA	10HCB03CT001	20HCB03CT001	30HCB03CT001	SB CNDS (APH "A"SB DRAIN LINE)	TC-K	0-500	DEG C	0	1	1	1
628	NA	10HCB03CT002	20HCB03CT002	30HCB03CT002	SB CNDS (APH "A"SB DRAIN LINE)	TC-K	0-500	DEG C	0	1	1	1
629	NA	10HCB03CT003	20HCB03CT003	30HCB03CT003	SB CNDS (APH "B"SB DRAIN LINE)	TC-K	0-500	DEG C	0	1	1	1
630	NA	10HCB03CT004	20HCB03CT004	30HCB03CT004	SB CNDS (APH "B"SB DRAIN LINE)	TC-K	0-500	DEG C	0	1	1	1
631	NA	10HCB40CT001	20HCB40CT001	30HCB40CT001	SB CNDS (WB DRAIN LINE-RIGHT & REAR)	TC-K	0-500	DEG C	0	1	1	1
632	NA	10HCB40CT002	20HCB40CT002	30HCB40CT002	SB CNDS (WB DRAIN LINE-RIGHT & REAR)	TC-K	0-500	DEG C	0	1	1	1
633	NA	10HCB20CT001	20HCB20CT001	30HCB20CT001	SB CNDS (WB DRAIN LINE-FRONT & LEFT)	TC-K	0-500	DEG C	0	1	1	1
634	NA	10HCB20CT002	20HCB20CT002	30HCB20CT002	SB CNDS (WB DRAIN LINE-FRONT & LEFT)	TC-K	0-500	DEG C	0	1	1	1
635	NA	10HJF50CT001	20HJF50CT001	30HJF50CT001	HEAVY OIL SUPPLY TEMPERATURE	RTD	0-200	DEG C	0	1	1	1
636	NA	10HJF50CT002	20HJF50CT002	30HJF50CT002	HEAVY OIL SUPPLY HEADER TEMPERATURE	RTD	0-200	DEG C	0	1	1	1
637	NA	10HJF50CT003	20HJF50CT003	30HJF50CT003	HEAVY OIL SUPPLY HEADER TEMPERATURE	RTD	0-200	DEG C	0	1	1	1
638	NA	10HJF50CT004	20HJF50CT004	30HJF50CT004	HEAVY OIL SUPPLY HEADER TEMPERATURE	RTD	0-200	DEG C	0	1	1	1
639	00HJF20CT001	NA	NA	NA	TEMPERATURE AT PUMP HOUSE DISCHARGE	RTD		DEG C	1	0	0	0
640	00HJF40CT001	NA	NA	NA	TEMPERATURE AT SUCTION STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
641	00HJF50CT001	NA	NA	NA	TEMPERATURE AT HFO HEATER SET INLET	RTD	0-40	DEG C	1	0	0	0
642	00HJF51CT001	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
643	00HJF52CT001	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
644	00HJF53CT001	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
645	00HJF51CT002	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
646	00HJF52CT002	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
647	00HJF53CT002	NA	NA	NA	TEMPERATURE AT STRAINER INLET	RTD	0-120	DEG C	1	0	0	0
648	00HJF60CT001	NA	NA	NA	TEMPERATURE AT HFO HEATER SET DISCHARGE	RTD	0-120	DEG C	1	0	0	0
649	00HJF70CT001	NA	NA	NA	HFO TEMPERATURE AT COOLER OUTLET	RTD	0-80	DEG C	1	0	0	0
650	00HJF70CT002	NA	NA	NA	HFO TEMPERATURE AT COOLER OUTLET	RTD	0-80	DEG C	1	0	0	0
651	NA	10LBA10CT005A	20LBA10CT005A	30LBA10CT005A	MS U/STR T HPBP 1	TC-K	0-600	DEG C	0	1	1	1
652	NA	10LBA10CT006A	20LBA10CT006A	30LBA10CT006A	MS ESV 1 U/STR T	TC-K	0-600	DEG C	0	1	1	1
653	NA	10LBA11CT007A	20LBA11CT007A	30LBA11CT007A	MS U/STR T HPBP 1	TC-K	0-600	DEG C	0	1	1	1
654	NA	10LBA12CT007A	20LBA12CT007A	30LBA12CT007A	MS ESV 2 U/STR T	TC-K	0-600	DEG C	0	1	1	1
655	NA	10LBB10CT005A	20LBB10CT005A	30LBB10CT005A	MS U/STR HPBP 2	TC-K	0-600	DEG C	0	1	1	1
656	NA	10LBB10CT006A	20LBB10CT006A	30LBB10CT006A	MS U/STR HPBP 2	TC-K	0-600	DEG C	0	1	1	1
657	NA	10LBB11CT007A	20LBB11CT007A	30LBB11CT007A	INTCPT ESV 1 U/STR T	TC-K	0-700	DEG C	0	1	1	1
658	NA	10LBB12CT007A	20LBB12CT007A	30LBB12CT007A	INTCPT ESV 2 U/STR T	TC-K	0-700	DEG C	0	1	1	1
659	NA	10LBB21CT001A	20LBB21CT001A	30LBB21CT001A	IPS B/P-V 1 U/STR T	TC-K	0-700	DEG C	0	1	1	1
660	NA	10LBB21CT002A	20LBB21CT002A	30LBB21CT002A	IPS B/P-V 1 U/STR T	TC-K	0-700	DEG C	0	1	1	1
661	NA	10LBB22CT001A	20LBB22CT001A	30LBB22CT001A	IPS B/P-V 1 U/STR T	TC-K	0-700	DEG C	0	1	1	1
662	NA	10LBB22CT002A	20LBB22CT002A	30LBB22CT002A	IPS B/P-V 1 U/STR T	TC-K	0-700	DEG C	0	1	1	1
663	NA	10LBC10CT001A	20LBC10CT001A	30LBC10CT001A	CRH NRF U/STR T	TC-K	0-600	DEG C	0	1	1	1
664	NA	10LBG30CT001A	20LBG30CT001A	30LBG30CT001A	SUP-V U/STR SS T	TC-K	0-400	DEG C	0	1	1	1
665	NA	10LBG30CT002A	20LBG30CT002A	30LBG30CT002A	SUP-V U/STR SS T	TC-K	0-400	DEG C	0	1	1	1
666	NA	10LBQ60CT001A	20LBQ60CT001A	30LBQ60CT001A	EXTN 6 T	TC-K	0-600	DEG C	0	1	1	1
667	NA	10LBQ70CT001A	20LBQ70CT001A	30LBQ70CT001A	EXTN 7 T	TC-K	0-600	DEG C	0	1	1	1
668	NA	10LBQ90CT001A	20LBQ90CT001A	30LBQ90CT001A	EXTN 9 T	TC-K	0-300	DEG C	0	1	1	1
669	NA	10LBS20CT001A	20LBS20CT001A	30LBS20CT001A	EXTN 2 T	TC-K	0-300	DEG C	0	1	1	1
670	NA	10LBS30CT001A	20LBS30CT001A	30LBS30CT001A	EXTN 3 T	TC-K	0-300	DEG C	0	1	1	1
671	NA	10LBS40CT001A	20LBS40CT001A	30LBS40CT001A	EXTN 4 T	TC-K	0-400	DEG C	0	1	1	1
672	NA	10LBS50CT001A	20LBS50CT001A	30LBS50CT001A	EXTN 5 T	TC-K	0-600	DEG C	0	1	1	1
673	NA	10MAA11CT021A	20MAA11CT021A	30MAA11CT021A	MS ESV 1 100% CSG T	TC-K	0-600	DEG C	0	1	1	1
674	NA	10MAA11CT022A	20MAA11CT022A	30MAA11CT022A	MS ESV 1 50% CSG T	TC-K	0-600	DEG C	0	1	1	1
675	NA	10MAA12CT021A	20MAA12CT021A	30MAA12CT021A	MS C-V 1 100% CSG T	TC-K	0-600	DEG C	0	1	1	1
676	NA	10MAA12CT022A	20MAA12CT022A	30MAA12CT022A	MS C-V 1 50% CSG T	TC-K	0-600	DEG C	0	1	1	1
677	NA	10MAA21CT021A	20MAA21CT021A	30MAA21CT021A	MS ESV 2 100% CSG T	TC-K	0-600	DEG C	0	1	1	1
678	NA	10MAA50CT011A	20MAA50CT011A	30MAA50CT011A	HPT BLD FR INR CSG 100% T	TC-K	0-600	DEG C	0	1	1	1
679	NA	10MAA50CT012A	20MAA50CT012A	30MAA50CT012A	HPT BLD FR INR CSG 100% T	TC-K	0-600	DEG C	0	1	1	1
680	NA	10MAA50CT013A	20MAA50CT013A	30MAA50CT013A	HPT BLD FR INR CSG 100% T	TC-K	0-600	DEG C	0	1	1	1
681	NA	10MAA50CT015A	20MAA50CT015A	30MAA50CT015A	RR INR CSG BLD STM 100% T	TC-K	0-600	DEG C	0	1	1	1
682	NA	10MAA50CT016A	20MAA50CT016A	30MAA50CT016A	RR INR CSG BLD STM 100% T	TC-K	0-600	DEG C	0	1	1	1
683	NA	10MAA50CT017A	20MAA50CT017A	30MAA50CT017A	RR INR CSG BLD STM 100% T	TC-K	0-600	DEG C	0	1	1	1
684	NA	10MAA50CT022A	20MAA50CT022A	30MAA50CT022A	HPT EXH STMT	TC-K	0-600	DEG C	0	1	1	1
685	NA	10MAA50CT023A	20MAA50CT023A	30MAA50CT023A	HPT EXH STMT	TC-K	0-600	DEG C	0	1	1	1
686	NA	10MAA50CT025A	20MAA50CT025A	30MAA50CT025A	HPT BAL PIST GS T	TC-K	0-600	DEG C	0	1	1	1
687	NA	10MAA50CT026A	20MAA50CT026A	30MAA50CT026A	HPT BAL PIST GS T	TC-K	0-600	DEG C	0	1	1	1
688	NA	10MAA50CT031A	20MAA50CT031A	30MAA50CT031A	HPT OUTR CSG 100%T	TC-K	0-600	DEG C	0	1	1	1
689	NA	10MAA50CT032A	20MAA50CT032A	30MAA50CT032A	HPT OUTR CSG 50%T	TC-K	0-600	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
690	NA	10MAA50CT051A	20MAA50CT051A	30MAA50CT051A	CSG T HP CSG CTR TOP 50%	TC-K	0-600	DEG C	0	1	1	1
691	NA	10MAA50CT052A	20MAA50CT052A	30MAA50CT052A	CSG T HP CSG CTR BTM 50%	TC-K	0-600	DEG C	0	1	1	1
692	NA	10MAB11CT021A	20MAB11CT021A	30MAB11CT021A	INTCPT ESV1 100% CSG T	TC-K	0-700	DEG C	0	1	1	1
693	NA	10MAB21CT021A	20MAB21CT021A	30MAB21CT021A	INTCPT ESV2 100% CSG T	TC-K	0-700	DEG C	0	1	1	1
694	NA	10MAB50CT012A	20MAB50CT012A	30MAB50CT012A	IPT BLD FR INR CSG 100% T	TC-K	0-700	DEG C	0	1	1	1
695	NA	10MAB50CT013A	20MAB50CT013A	30MAB50CT013A	IPT BLD FR INR CSG 100% T	TC-K	0-700	DEG C	0	1	1	1
696	NA	10MAB50CT022A	20MAB50CT022A	30MAB50CT022A	IPT EXH STMT	TC-K	0-400	DEG C	0	1	1	1
697	NA	10MAB50CT023A	20MAB50CT023A	30MAB50CT023A	IPT EXH STMT	TC-K	0-400	DEG C	0	1	1	1
698	NA	10MAB50CT041A	20MAB50CT041A	30MAB50CT041A	IPT CSG FR LHT 50% T	TC-K	0-700	DEG C	0	1	1	1
699	NA	10MAB50CT042A	20MAB50CT042A	30MAB50CT042A	IPT CSG FR RHB 50% T	TC-K	0-700	DEG C	0	1	1	1
700	NA	10MAC10CT011A	20MAC10CT011A	30MAC10CT011A	LPT 1 FNL STG U/STR STMT	TC-K	0-300	DEG C	0	1	1	1
701	NA	10MAC10CT012A	20MAC10CT012A	30MAC10CT012A	LPT 1 FNL STG U/STR STMT	TC-K	0-300	DEG C	0	1	1	1
702	NA	10MAC10CT013A	20MAC10CT013A	30MAC10CT013A	LPT 1 FNL STG U/STR STMT	TC-K	0-300	DEG C	0	1	1	1
703	NA	10MAC10CT072A	20MAC10CT072A	30MAC10CT072A	LPT 1 TOP EXH STMT	TC-K	0-150	DEG C	0	1	1	1
704	NA	10MAC10CT073A	20MAC10CT073A	30MAC10CT073A	LPT 1 TOP EXH STMT	TC-K	0-150	DEG C	0	1	1	1
705	NA	10MAD11CT011A	20MAD11CT011A	30MAD11CT011A	ST RAD BRG 1 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
706	NA	10MAD11CT011B	20MAD11CT011B	30MAD11CT011B	ST RAD BRG 1 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
707	NA	10MAD11CT011C	20MAD11CT011C	30MAD11CT011C	ST RAD BRG 1 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
708	NA	10MAD11CT012A	20MAD11CT012A	30MAD11CT012A	ST RAD BRG 1 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
709	NA	10MAD11CT012B	20MAD11CT012B	30MAD11CT012B	ST RAD BRG 1 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
710	NA	10MAD11CT012C	20MAD11CT012C	30MAD11CT012C	ST RAD BRG 1 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
711	NA	10MAD11CT013A	20MAD11CT013A	30MAD11CT013A	ST RAD BRG 1 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
712	NA	10MAD11CT013B	20MAD11CT013B	30MAD11CT013B	ST RAD BRG 1 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
713	NA	10MAD11CT013C	20MAD11CT013C	30MAD11CT013C	ST RAD BRG 1 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
714	NA	10MAD11CT014A	20MAD11CT014A	30MAD11CT014A	ST RAD BRG 1 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
715	NA	10MAD11CT014B	20MAD11CT014B	30MAD11CT014B	ST RAD BRG 1 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
716	NA	10MAD11CT014C	20MAD11CT014C	30MAD11CT014C	ST RAD BRG 1 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
717	NA	10MAD12CT011A	20MAD12CT011A	30MAD12CT011A	ST RAD BRG 2 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
718	NA	10MAD12CT011B	20MAD12CT011B	30MAD12CT011B	ST RAD BRG 2 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
719	NA	10MAD12CT011C	20MAD12CT011C	30MAD12CT011C	ST RAD BRG 2 TS LHT T	TC-K	0-150	DEG C	0	1	1	1
720	NA	10MAD12CT012A	20MAD12CT012A	30MAD12CT012A	ST RAD BRG 2 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
721	NA	10MAD12CT012B	20MAD12CT012B	30MAD12CT012B	ST RAD BRG 2 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
722	NA	10MAD12CT012C	20MAD12CT012C	30MAD12CT012C	ST RAD BRG 2 TS RHT T	TC-K	0-150	DEG C	0	1	1	1
723	NA	10MAD12CT013A	20MAD12CT013A	30MAD12CT013A	ST RAD BRG 2 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
724	NA	10MAD12CT013B	20MAD12CT013B	30MAD12CT013B	ST RAD BRG 2 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
725	NA	10MAD12CT013C	20MAD12CT013C	30MAD12CT013C	ST RAD BRG 2 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
726	NA	10MAD12CT014A	20MAD12CT014A	30MAD12CT014A	ST RAD BRG 2 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
727	NA	10MAD12CT014B	20MAD12CT014B	30MAD12CT014B	ST RAD BRG 2 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
728	NA	10MAD12CT014C	20MAD12CT014C	30MAD12CT014C	ST RAD BRG 2 TS RHB T	TC-K	0-150	DEG C	0	1	1	1
729	NA	10MAD12CT031A	20MAD12CT031A	30MAD12CT031A	ST AX BRG 2 TS LH T	TC-K	0-150	DEG C	0	1	1	1
730	NA	10MAD12CT031B	20MAD12CT031B	30MAD12CT031B	ST AX BRG 2 TS LH T	TC-K	0-150	DEG C	0	1	1	1
731	NA	10MAD12CT031C	20MAD12CT031C	30MAD12CT031C	ST AX BRG 2 TS LH T	TC-K	0-150	DEG C	0	1	1	1
732	NA	10MAD12CT032A	20MAD12CT032A	30MAD12CT032A	ST AX BRG 2 TS RH T	TC-K	0-150	DEG C	0	1	1	1
733	NA	10MAD12CT032B	20MAD12CT032B	30MAD12CT032B	ST AX BRG 2 TS RH T	TC-K	0-150	DEG C	0	1	1	1
734	NA	10MAD12CT032C	20MAD12CT032C	30MAD12CT032C	ST AX BRG 2 TS RH T	TC-K	0-150	DEG C	0	1	1	1
735	NA	10MAD12CT033A	20MAD12CT033A	30MAD12CT033A	ST AX BRG 2 GS LH T	TC-K	0-150	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
736	NA	10MAD12CT033B	20MAD12CT033B	30MAD12CT033B	ST AX BRG 2 GS LH T	TC-K	0-150	DEG C	0	1	1	1
737	NA	10MAD12CT033C	20MAD12CT033C	30MAD12CT033C	ST AX BRG 2 GS LH T	TC-K	0-150	DEG C	0	1	1	1
738	NA	10MAD12CT034A	20MAD12CT034A	30MAD12CT034A	ST AX BRG 2 GS RH T	TC-K	0-150	DEG C	0	1	1	1
739	NA	10MAD12CT034B	20MAD12CT034B	30MAD12CT034B	ST AX BRG 2 GS RH T	TC-K	0-150	DEG C	0	1	1	1
740	NA	10MAD12CT034C	20MAD12CT034C	30MAD12CT034C	ST AX BRG 2 GS RH T	TC-K	0-150	DEG C	0	1	1	1
741	NA	10MAD13CT013A	20MAD13CT013A	30MAD13CT013A	ST RAD BRG 3 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
742	NA	10MAD13CT013B	20MAD13CT013B	30MAD13CT013B	ST RAD BRG 3 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
743	NA	10MAD13CT013C	20MAD13CT013C	30MAD13CT013C	ST RAD BRG 3 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
744	NA	10MAD13CT017A	20MAD13CT017A	30MAD13CT017A	ST RAD BRG 3 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
745	NA	10MAD13CT017B	20MAD13CT017B	30MAD13CT017B	ST RAD BRG 3 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
746	NA	10MAD13CT017C	20MAD13CT017C	30MAD13CT017C	ST RAD BRG 3 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
747	NA	10MAD14CT013A	20MAD14CT013A	30MAD14CT013A	ST RAD BRG 4 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
748	NA	10MAD14CT013B	20MAD14CT013B	30MAD14CT013B	ST RAD BRG 4 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
749	NA	10MAD14CT013C	20MAD14CT013C	30MAD14CT013C	ST RAD BRG 4 TS LHB T	TC-K	0-150	DEG C	0	1	1	1
750	NA	10MAD14CT017A	20MAD14CT017A	30MAD14CT017A	ST RAD BRG 4 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
751	NA	10MAD14CT017B	20MAD14CT017B	30MAD14CT017B	ST RAD BRG 4 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
752	NA	10MAD14CT017C	20MAD14CT017C	30MAD14CT017C	ST RAD BRG 4 GS LHB T	TC-K	0-150	DEG C	0	1	1	1
753	NA	10MAL00CT001A	20MAL00CT001A	30MAL00CT001A	METAL TEMP. THERMOCOUPLE AT FLASH BOX 1	TC-K	0-700	DEG C	0	1	1	1
754	NA	10MAL00CT002A	20MAL00CT002A	30MAL00CT002A	METAL TEMP. THERMOCOUPLE AT FLASH BOX 2	TC-K	0-700	DEG C	0	1	1	1
755	NA	10MAM20CT001A	20MAM20CT001A	30MAM20CT001A	ST INFL U-RING SUC T	TC-K	0-600	DEG C	0	1	1	1
756	NA	10MAM20CT002A	20MAM20CT002A	30MAM20CT002A	ST INFL U-RING SUC T	TC-K	0-600	DEG C	0	1	1	1
757	NA	10MAM40CT001A	20MAM40CT001A	30MAM40CT001A	SS MFLD FR T	TC-K	0-600	DEG C	0	1	1	1
758	NA	10MAM40CT002A	20MAM40CT002A	30MAM40CT002A	SS MFLD RR T	TC-K	0-600	DEG C	0	1	1	1
759	NA	10MAV91CT001A	20MAV91CT001A	30MAV91CT001A	L/O STM MFLD T	TC-K	0-600	DEG C	0	1	1	1
760	NA	10MAV91CT002A	20MAV91CT002A	30MAV91CT002A	CW TEMP.BEF OIL CLR	RTD	0-100	DEG C	0	1	1	1
761	NA	10MAW20CT001A	20MAW20CT001A	30MAW20CT001A	CW TEMP. INLET TO HPSU OIL CLR	RTD	0-100	DEG C	0	1	1	1
762	NA	10MAW20CT003A	20MAW20CT003A	30MAW20CT003A	CW TEMP. INLET TO LPBP OIL CLR	RTD	0-100	DEG C	0	1	1	1
763	NA	10MAW60CT001A	20MAW60CT001A	30MAW60CT001A	CW TEMP.AFT OIL CLR	RTD	0-100	DEG C	0	1	1	1
764	NA	10PGB10CT001A	20PGB10CT001A	30PGB10CT001A	CW TEMP. OUTLET HPSU OIL CLR	RTD	0-100	DEG C	0	1	1	1
765	NA	10PGB11CT001A	20PGB11CT001A	30PGB11CT001A	CW TEMP. OUTLET LPBP OIL CLR	RTD	0-100	DEG C	0	1	1	1
766	NA	10PGB12CT001A	20PGB12CT001A	30PGB12CT001A	TEMP. U-SEAL RING DRN. IPSV	TC-K	0-700	DEG C	0	1	1	1
767	NA	10PGB13CT001A	20PGB13CT001A	30PGB13CT001A	TEMP. U-SEAL RING DRN. IPCV	TC-K	0-700	DEG C	0	1	1	1
768	NA	10PGB14CT001A	20PGB14CT001A	30PGB14CT001A	OIL TEMP OF HEATER	RTD	0-100	DEG C	0	1	1	1
769	NA	10PGB15CT001A	20PGB15CT001A	30PGB15CT001A	WATER TEMP OF HEATER	RTD	0-100	DEG C	0	1	1	1
770	NA	10MKD11CT013A	20MKD11CT013A	30MKD11CT013A	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
771	NA	10MKD11CT013B	20MKD11CT013B	30MKD11CT013B	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
772	NA	10MKD11CT013C	20MKD11CT013C	30MKD11CT013C	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
773	NA	10MKD11CT017A	20MKD11CT017A	30MKD11CT017A	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
774	NA	10MKD11CT017B	20MKD11CT017B	30MKD11CT017B	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
775	NA	10MKD11CT017C	20MKD11CT017C	30MKD11CT017C	TEMP.BEARING METAL (TE)	TC-K	0-150	DEG C	0	1	1	1
776	NA	10MKD12CT013A	20MKD12CT013A	30MKD12CT013A	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1
777	NA	10MKD12CT013B	20MKD12CT013B	30MKD12CT013B	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1
778	NA	10MKD12CT013C	20MKD12CT013C	30MKD12CT013C	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1
779	NA	10MKD12CT017A	20MKD12CT017A	30MKD12CT017A	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1
780	NA	10MKD12CT017B	20MKD12CT017B	30MKD12CT017B	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1
781	NA	10MKD12CT017C	20MKD12CT017C	30MKD12CT017C	TEMP.BEARING METAL (EE)	TC-K	0-150	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
782	NA	10MKD21CT013A	20MKD21CT013A	30MKD21CT013A	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
783	NA	10MKD21CT013B	20MKD21CT013B	30MKD21CT013B	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
784	NA	10MKD21CT013C	20MKD21CT013C	30MKD21CT013C	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
785	NA	10MKD21CT014A	20MKD21CT014A	30MKD21CT014A	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
786	NA	10MKD21CT014B	20MKD21CT014B	30MKD21CT014B	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
787	NA	10MKD21CT014C	20MKD21CT014C	30MKD21CT014C	TEMP. EXCITER BEARING	TC-K	0-150	DEG C	0	1	1	1
788	NA	10PGB01CT002A	20PGB01CT002A	30PGB01CT002A	CW I/L TEMP TO AIR COOLERS	RTD	0-200	DEG C	0	1	1	1
789	NA	10PGB01CT015A	20PGB01CT015A	30PGB01CT015A	CW O/L TEMP FROM AIR COOLERS	RTD	0-200	DEG C	0	1	1	1
790	NA	10PGB01CT016A	20PGB01CT016A	30PGB01CT016A	CW O/L TEMP FROM AIR COOLERS	RTD	0-200	DEG C	0	1	1	1
791	NA	10PGB21CT001A	20PGB21CT001A	30PGB21CT001A	TEMP AT O/L PW CLR-1	RTD	0-200	DEG C	0	1	1	1
792	NA	10PGB22CT001A	20PGB22CT001A	30PGB22CT001A	TEMP AT O/L PW CLR-2	RTD	0-200	DEG C	0	1	1	1
793	NA	10PGB23CT001A	20PGB23CT001A	30PGB23CT001A	TEMP- INLET OF PW CLRS	RTD	0-200	DEG C	0	1	1	1
794	NA	10PGB30CT001A	20PGB30CT001A	30PGB30CT001A	WATER TEMP BFR H2 CLRS	RTD	0-200	DEG C	0	1	1	1
795	NA	10PGB30CT002A	20PGB30CT002A	30PGB30CT002A	WATER TEMP BFR H2 CLRS	RTD	0-200	DEG C	0	1	1	1
796	NA	10PGB32CT001A	20PGB32CT001A	30PGB32CT001A	WATER TEMP AFT H2 CLR A	RTD	0-200	DEG C	0	1	1	1
797	NA	10PGB32CT002A	20PGB32CT002A	30PGB32CT002A	WATER TEMP AFT H2 CLR B	RTD	0-200	DEG C	0	1	1	1
798	NA	10PGB32CT003A	20PGB32CT003A	30PGB32CT003A	WATER TEMP AFT H2 CLR C	RTD	0-200	DEG C	0	1	1	1
799	NA	10PGB32CT004A	20PGB32CT004A	30PGB32CT004A	WATER TEMP AFT H2 CLR D	RTD	0-200	DEG C	0	1	1	1
800	NA	10PGB33CT001A	20PGB33CT001A	30PGB33CT001A	WATER TEMP AFT H2 CLR	RTD	0-200	DEG C	0	1	1	1
801	NA	10MKA 20CT001A	20MKA 20CT001A	30MKA 20CT001A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
802	NA	10MKA 20 CT002A	20MKA 20 CT002A	30MKA 20 CT002A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
803	NA	10MKA 20 CT003A	20MKA 20 CT003A	30MKA 20 CT003A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
804	NA	10MKA 20 CT004A	20MKA 20 CT004A	30MKA 20 CT004A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
805	NA	10MKA 20 CT005A	20MKA 20 CT005A	30MKA 20 CT005A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
806	NA	10MKA 20 CT006A	20MKA 20 CT006A	30MKA 20 CT006A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
807	NA	10MKA 20 CT007A	20MKA 20 CT007A	30MKA 20 CT007A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
808	NA	10MKA 20 CT008A	20MKA 20 CT008A	30MKA 20 CT008A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
809	NA	10MKA 20 CT009A	20MKA 20 CT009A	30MKA 20 CT009A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
810	NA	10MKA 20 CT010A	20MKA 20 CT010A	30MKA 20 CT010A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
811	NA	10MKA 20 CT011A	20MKA 20 CT011A	30MKA 20 CT011A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
812	NA	10MKA 20 CT012A	20MKA 20 CT012A	30MKA 20 CT012A	TEMPERATURE SENSOR IN STATOR SLOT TE	RTD	0-200	DEG C	0	1	1	1
813	NA	10MKA 21 CT001	20MKA 21 CT001	30MKA 21 CT001	TEMP UPPER BAR-01	RTD	0-150	DEG C	0	1	1	1
814	NA	10MKA 21 CT002	20MKA 21 CT002	30MKA 21 CT002	TEMP UPPER BAR-02	RTD	0-150	DEG C	0	1	1	1
815	NA	10MKA 21 CT003	20MKA 21 CT003	30MKA 21 CT003	TEMP UPPER BAR-03	RTD	0-150	DEG C	0	1	1	1
816	NA	10MKA 21 CT004	20MKA 21 CT004	30MKA 21 CT004	TEMP UPPER BAR-04	RTD	0-150	DEG C	0	1	1	1
817	NA	10MKA 21 CT005	20MKA 21 CT005	30MKA 21 CT005	TEMP UPPER BAR-05	RTD	0-150	DEG C	0	1	1	1
818	NA	10MKA 21 CT006	20MKA 21 CT006	30MKA 21 CT006	TEMP UPPER BAR-06	RTD	0-150	DEG C	0	1	1	1
819	NA	10MKA 21 CT007	20MKA 21 CT007	30MKA 21 CT007	TEMP UPPER BAR-07	RTD	0-150	DEG C	0	1	1	1
820	NA	10MKA 21 CT008	20MKA 21 CT008	30MKA 21 CT008	TEMP UPPER BAR-08	RTD	0-150	DEG C	0	1	1	1
821	NA	10MKA 21 CT009	20MKA 21 CT009	30MKA 21 CT009	TEMP UPPER BAR-09	RTD	0-150	DEG C	0	1	1	1
822	NA	10MKA 21 CT010	20MKA 21 CT010	30MKA 21 CT010	TEMP UPPER BAR-10	RTD	0-150	DEG C	0	1	1	1
823	NA	10MKA 21 CT011	20MKA 21 CT011	30MKA 21 CT011	TEMP UPPER BAR-11	RTD	0-150	DEG C	0	1	1	1
824	NA	10MKA 21 CT012	20MKA 21 CT012	30MKA 21 CT012	TEMP UPPER BAR-12	RTD	0-150	DEG C	0	1	1	1
825	NA	10MKA 21 CT013	20MKA 21 CT013	30MKA 21 CT013	TEMP UPPER BAR-13	RTD	0-150	DEG C	0	1	1	1
826	NA	10MKA 21 CT014	20MKA 21 CT014	30MKA 21 CT014	TEMP UPPER BAR-14	RTD	0-150	DEG C	0	1	1	1
827	NA	10MKA 21 CT015	20MKA 21 CT015	30MKA 21 CT015	TEMP UPPER BAR-15	RTD	0-150	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
828	NA	10MKA 21 CT016	20MKA 21 CT016	30MKA 21 CT016	TEMP UPPER BAR-16	RTD	0-150	DEG C	0	1	1	1
829	NA	10MKA 21 CT017	20MKA 21 CT017	30MKA 21 CT017	TEMP UPPER BAR-17	RTD	0-150	DEG C	0	1	1	1
830	NA	10MKA 21 CT018	20MKA 21 CT018	30MKA 21 CT018	TEMP UPPER BAR-18	RTD	0-150	DEG C	0	1	1	1
831	NA	10MKA 21 CT019	20MKA 21 CT019	30MKA 21 CT019	TEMP UPPER BAR-19	RTD	0-150	DEG C	0	1	1	1
832	NA	10MKA 21 CT020	20MKA 21 CT020	30MKA 21 CT020	TEMP UPPER BAR-20	RTD	0-150	DEG C	0	1	1	1
833	NA	10MKA 21 CT021	20MKA 21 CT021	30MKA 21 CT021	TEMP UPPER BAR-21	RTD	0-150	DEG C	0	1	1	1
834	NA	10MKA 21 CT022	20MKA 21 CT022	30MKA 21 CT022	TEMP UPPER BAR-22	RTD	0-150	DEG C	0	1	1	1
835	NA	10MKA 21 CT023	20MKA 21 CT023	30MKA 21 CT023	TEMP UPPER BAR-23	RTD	0-150	DEG C	0	1	1	1
836	NA	10MKA 21 CT024	20MKA 21 CT024	30MKA 21 CT024	TEMP UPPER BAR-24	RTD	0-150	DEG C	0	1	1	1
837	NA	10MKA 21 CT025	20MKA 21 CT025	30MKA 21 CT025	TEMP UPPER BAR-25	RTD	0-150	DEG C	0	1	1	1
838	NA	10MKA 21 CT026	20MKA 21 CT026	30MKA 21 CT026	TEMP UPPER BAR-26	RTD	0-150	DEG C	0	1	1	1
839	NA	10MKA 21 CT027	20MKA 21 CT027	30MKA 21 CT027	TEMP UPPER BAR-27	RTD	0-150	DEG C	0	1	1	1
840	NA	10MKA 21 CT028	20MKA 21 CT028	30MKA 21 CT028	TEMP UPPER BAR-28	RTD	0-150	DEG C	0	1	1	1
841	NA	10MKA 21 CT029	20MKA 21 CT029	30MKA 21 CT029	TEMP UPPER BAR-29	RTD	0-150	DEG C	0	1	1	1
842	NA	10MKA 21 CT030	20MKA 21 CT030	30MKA 21 CT030	TEMP UPPER BAR-30	RTD	0-150	DEG C	0	1	1	1
843	NA	10MKA 21 CT031	20MKA 21 CT031	30MKA 21 CT031	TEMP UPPER BAR-31	RTD	0-150	DEG C	0	1	1	1
844	NA	10MKA 21 CT032	20MKA 21 CT032	30MKA 21 CT032	TEMP UPPER BAR-32	RTD	0-150	DEG C	0	1	1	1
845	NA	10MKA 21 CT033	20MKA 21 CT033	30MKA 21 CT033	TEMP UPPER BAR-33	RTD	0-150	DEG C	0	1	1	1
846	NA	10MKA 21 CT034	20MKA 21 CT034	30MKA 21 CT034	TEMP UPPER BAR-34	RTD	0-150	DEG C	0	1	1	1
847	NA	10MKA 21 CT035	20MKA 21 CT035	30MKA 21 CT035	TEMP UPPER BAR-35	RTD	0-150	DEG C	0	1	1	1
848	NA	10MKA 21 CT036	20MKA 21 CT036	30MKA 21 CT036	TEMP UPPER BAR-36	RTD	0-150	DEG C	0	1	1	1
849	NA	10MKA 21 CT037	20MKA 21 CT037	30MKA 21 CT037	TEMP UPPER BAR-37	RTD	0-150	DEG C	0	1	1	1
850	NA	10MKA 21 CT038	20MKA 21 CT038	30MKA 21 CT038	TEMP UPPER BAR-38	RTD	0-150	DEG C	0	1	1	1
851	NA	10MKA 21 CT039	20MKA 21 CT039	30MKA 21 CT039	TEMP UPPER BAR-39	RTD	0-150	DEG C	0	1	1	1
852	NA	10MKA 21 CT040	20MKA 21 CT040	30MKA 21 CT040	TEMP UPPER BAR-40	RTD	0-150	DEG C	0	1	1	1
853	NA	10MKA 21 CT041	20MKA 21 CT041	30MKA 21 CT041	TEMP UPPER BAR-41	RTD	0-150	DEG C	0	1	1	1
854	NA	10MKA 21 CT042	20MKA 21 CT042	30MKA 21 CT042	TEMP UPPER BAR-42	RTD	0-150	DEG C	0	1	1	1
855	NA	10MKA 22 CT001	20MKA 22 CT001	30MKA 22 CT001	TEMP LOWER BAR-01	RTD	0-150	DEG C	0	1	1	1
856	NA	10MKA 22 CT002	20MKA 22 CT002	30MKA 22 CT002	TEMP LOWER BAR-02	RTD	0-150	DEG C	0	1	1	1
857	NA	10MKA 22 CT003	20MKA 22 CT003	30MKA 22 CT003	TEMP LOWER BAR-03	RTD	0-150	DEG C	0	1	1	1
858	NA	10MKA 22 CT004	20MKA 22 CT004	30MKA 22 CT004	TEMP LOWER BAR-04	RTD	0-150	DEG C	0	1	1	1
859	NA	10MKA 22 CT005	20MKA 22 CT005	30MKA 22 CT005	TEMP LOWER BAR-05	RTD	0-150	DEG C	0	1	1	1
860	NA	10MKA 22 CT006	20MKA 22 CT006	30MKA 22 CT006	TEMP LOWER BAR-06	RTD	0-150	DEG C	0	1	1	1
861	NA	10MKA 22 CT007	20MKA 22 CT007	30MKA 22 CT007	TEMP LOWER BAR-07	RTD	0-150	DEG C	0	1	1	1
862	NA	10MKA 22 CT008	20MKA 22 CT008	30MKA 22 CT008	TEMP LOWER BAR-08	RTD	0-150	DEG C	0	1	1	1
863	NA	10MKA 22 CT009	20MKA 22 CT009	30MKA 22 CT009	TEMP LOWER BAR-09	RTD	0-150	DEG C	0	1	1	1
864	NA	10MKA 22 CT010	20MKA 22 CT010	30MKA 22 CT010	TEMP LOWER BAR-10	RTD	0-150	DEG C	0	1	1	1
865	NA	10MKA 22 CT011	20MKA 22 CT011	30MKA 22 CT011	TEMP LOWER BAR-11	RTD	0-150	DEG C	0	1	1	1
866	NA	10MKA 22 CT012	20MKA 22 CT012	30MKA 22 CT012	TEMP LOWER BAR-12	RTD	0-150	DEG C	0	1	1	1
867	NA	10MKA 22 CT013	20MKA 22 CT013	30MKA 22 CT013	TEMP LOWER BAR-13	RTD	0-150	DEG C	0	1	1	1
868	NA	10MKA 22 CT014	20MKA 22 CT014	30MKA 22 CT014	TEMP LOWER BAR-14	RTD	0-150	DEG C	0	1	1	1
869	NA	10MKA 22 CT015	20MKA 22 CT015	30MKA 22 CT015	TEMP LOWER BAR-15	RTD	0-150	DEG C	0	1	1	1
870	NA	10MKA 22 CT016	20MKA 22 CT016	30MKA 22 CT016	TEMP LOWER BAR-16	RTD	0-150	DEG C	0	1	1	1
871	NA	10MKA 22 CT017	20MKA 22 CT017	30MKA 22 CT017	TEMP LOWER BAR-17	RTD	0-150	DEG C	0	1	1	1
872	NA	10MKA 22 CT018	20MKA 22 CT018	30MKA 22 CT018	TEMP LOWER BAR-18	RTD	0-150	DEG C	0	1	1	1
873	NA	10MKA 22 CT019	20MKA 22 CT019	30MKA 22 CT019	TEMP LOWER BAR-19	RTD	0-150	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
874	NA	10MKA 22 CT020	20MKA 22 CT020	30MKA 22 CT020	TEMP LOWER BAR-20	RTD	0-150	DEG C	0	1	1	1
875	NA	10MKA 22 CT021	20MKA 22 CT021	30MKA 22 CT021	TEMP LOWER BAR-21	RTD	0-150	DEG C	0	1	1	1
876	NA	10MKA 22 CT022	20MKA 22 CT022	30MKA 22 CT022	TEMP LOWER BAR-22	RTD	0-150	DEG C	0	1	1	1
877	NA	10MKA 22 CT023	20MKA 22 CT023	30MKA 22 CT023	TEMP LOWER BAR-23	RTD	0-150	DEG C	0	1	1	1
878	NA	10MKA 22 CT024	20MKA 22 CT024	30MKA 22 CT024	TEMP LOWER BAR-24	RTD	0-150	DEG C	0	1	1	1
879	NA	10MKA 22 CT025	20MKA 22 CT025	30MKA 22 CT025	TEMP LOWER BAR-25	RTD	0-150	DEG C	0	1	1	1
880	NA	10MKA 22 CT026	20MKA 22 CT026	30MKA 22 CT026	TEMP LOWER BAR-26	RTD	0-150	DEG C	0	1	1	1
881	NA	10MKA 22 CT027	20MKA 22 CT027	30MKA 22 CT027	TEMP LOWER BAR-27	RTD	0-150	DEG C	0	1	1	1
882	NA	10MKA 22 CT028	20MKA 22 CT028	30MKA 22 CT028	TEMP LOWER BAR-28	RTD	0-150	DEG C	0	1	1	1
883	NA	10MKA 22 CT029	20MKA 22 CT029	30MKA 22 CT029	TEMP LOWER BAR-29	RTD	0-150	DEG C	0	1	1	1
884	NA	10MKA 22 CT030	20MKA 22 CT030	30MKA 22 CT030	TEMP LOWER BAR-30	RTD	0-150	DEG C	0	1	1	1
885	NA	10MKA 22 CT031	20MKA 22 CT031	30MKA 22 CT031	TEMP LOWER BAR-31	RTD	0-150	DEG C	0	1	1	1
886	NA	10MKA 22 CT032	20MKA 22 CT032	30MKA 22 CT032	TEMP LOWER BAR-32	RTD	0-150	DEG C	0	1	1	1
887	NA	10MKA 22 CT033	20MKA 22 CT033	30MKA 22 CT033	TEMP LOWER BAR-33	RTD	0-150	DEG C	0	1	1	1
888	NA	10MKA 22 CT034	20MKA 22 CT034	30MKA 22 CT034	TEMP LOWER BAR-34	RTD	0-150	DEG C	0	1	1	1
889	NA	10MKA 22 CT035	20MKA 22 CT035	30MKA 22 CT035	TEMP LOWER BAR-35	RTD	0-150	DEG C	0	1	1	1
890	NA	10MKA 22 CT036	20MKA 22 CT036	30MKA 22 CT036	TEMP LOWER BAR-36	RTD	0-150	DEG C	0	1	1	1
891	NA	10MKA 22 CT037	20MKA 22 CT037	30MKA 22 CT037	TEMP LOWER BAR-37	RTD	0-150	DEG C	0	1	1	1
892	NA	10MKA 22 CT038	20MKA 22 CT038	30MKA 22 CT038	TEMP LOWER BAR-38	RTD	0-150	DEG C	0	1	1	1
893	NA	10MKA 22 CT039	20MKA 22 CT039	30MKA 22 CT039	TEMP LOWER BAR-39	RTD	0-150	DEG C	0	1	1	1
894	NA	10MKA 22 CT040	20MKA 22 CT040	30MKA 22 CT040	TEMP LOWER BAR-40	RTD	0-150	DEG C	0	1	1	1
895	NA	10MKA 22 CT041	20MKA 22 CT041	30MKA 22 CT041	TEMP LOWER BAR-41	RTD	0-150	DEG C	0	1	1	1
896	NA	10MKA 22 CT042	20MKA 22 CT042	30MKA 22 CT042	TEMP LOWER BAR-42	RTD	0-150	DEG C	0	1	1	1
897	NA	10MKA 35 CT001	20MKA 35 CT001	30MKA 35 CT001	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
898	NA	10MKA 35 CT002	20MKA 35 CT002	30MKA 35 CT002	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
899	NA	10MKA 35 CT003	20MKA 35 CT003	30MKA 35 CT003	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
900	NA	10MKA 35 CT004	20MKA 35 CT004	30MKA 35 CT004	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
901	NA	10MKA 35 CT005	20MKA 35 CT005	30MKA 35 CT005	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
902	NA	10MKA 35 CT006	20MKA 35 CT006	30MKA 35 CT006	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
903	NA	10MKA 35 CT007	20MKA 35 CT007	30MKA 35 CT007	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
904	NA	10MKA 35 CT008	20MKA 35 CT008	30MKA 35 CT008	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
905	NA	10MKA 35 CT009	20MKA 35 CT009	30MKA 35 CT009	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
906	NA	10MKA 35 CT010	20MKA 35 CT010	30MKA 35 CT010	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
907	NA	10MKA 35 CT011	20MKA 35 CT011	30MKA 35 CT011	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
908	NA	10MKA 35 CT012	20MKA 35 CT012	30MKA 35 CT012	TEMP. STATOR CORE (TE)	RTD	0-200	DEG C	0	1	1	1
909	NA	10MKA 35 CT051	20MKA 35 CT051	30MKA 35 CT051	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
910	NA	10MKA 35 CT052	20MKA 35 CT052	30MKA 35 CT052	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
911	NA	10MKA 35 CT053	20MKA 35 CT053	30MKA 35 CT053	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
912	NA	10MKA 35 CT054	20MKA 35 CT054	30MKA 35 CT054	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
913	NA	10MKA 35 CT055	20MKA 35 CT055	30MKA 35 CT055	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
914	NA	10MKA 35 CT056	20MKA 35 CT056	30MKA 35 CT056	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
915	NA	10MKA 35 CT057	20MKA 35 CT057	30MKA 35 CT057	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
916	NA	10MKA 35 CT058	20MKA 35 CT058	30MKA 35 CT058	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
917	NA	10MKA 35 CT059	20MKA 35 CT059	30MKA 35 CT059	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
918	NA	10MKA 35 CT060	20MKA 35 CT060	30MKA 35 CT060	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
919	NA	10MKA 35 CT061	20MKA 35 CT061	30MKA 35 CT061	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
920	NA	10MKA 35 CT062	20MKA 35 CT062	30MKA 35 CT062	TEMP. STATOR CORE (EE)	RTD	0-200	DEG C	0	1	1	1
921	NA	10XAV10CT001	20XAV10CT001	30XAV10CT001	LUBE OIL TANK TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
922	NA	10XAV10CT002	20XAV10CT002	30XAV10CT002	LUBE OIL BEFORE COOLER TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
923	NA	10XAV60CT001	20XAV60CT001	30XAV60CT001	GEAR BOX DRAIN TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
924	NA	10XAV60CT002	20XAV60CT002	30XAV60CT002	TURBINE F.J.B.+ T.B. DRAIN TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
925	NA	10XAV60CT003	20XAV60CT003	30XAV60CT003	TURBINME R.J.B. + COUPLING DRAIN TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
926	NA	10LBS63CT001	20LBS63CT001	30LBS63CT001	LIVE STEAM TEMPERATURE **(BFPDT-A)**	TC-K	0-500	DEG C	0	1	1	1
927	NA	10LBS63CT002	20LBS63CT002	30LBS63CT002	LIVE STEAM TEMPERATURE **(BFPDT-A)**	TC-K	0-500	DEG C	0	1	1	1
928	NA	10MAW60CT001	20MAW60CT001	30MAW60CT001	AUXILIARY STEAM TO GLAND STEAM TEMPERATURE **(BFPDT-A)**	TC-K	0-500	DEG C	0	1	1	1
929	NA	10MAW70CT001	20MAW70CT001	30MAW70CT001	GLAND STEAM TEMPERATURE **(BFPDT-A)**	TC-K	0-500	DEG C	0	1	1	1
930	NA	10XAL01CT001	20XAL01CT001	30XAL01CT001	TURBINE CASING DRAIN TEMPERATURE **(BFPDT-A)**	TC-K	0-400	DEG C	0	1	1	1
931	NA	10XAL01CT002	20XAL01CT002	30XAL01CT002	TURBINE CASING CROSS DRAIN TEMPERATURE **(BFPDT-A)**	TC-K	0-400	DEG C	0	1	1	1
932	NA	10XAL01CT003	20XAL01CT003	30XAL01CT003	TURBINE CASING DRAIN TEMPERATURE **(BFPDT-A)**	TC-K	0-400	DEG C	0	1	1	1
933	NA	10MTA01CT160	20MTA01CT160	30MTA01CT160	TURBINE EXHAUST HOOD TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
934	NA	10MTA01CT161	20MTA01CT161	30MTA01CT161	TURBINE EXHAUST HOOD TEMPERATURE **(BFPDT-A)**	RTD	0-120	DEG C	0	1	1	1
935	NA	10XAA51CT053	20XAA51CT053	30XAA51CT053	TURBINE 100% CASING TEMPERATURE **(BFPDT-A)**	TC-K	0-400	DEG C	0	1	1	1
936	NA	10XAV11CT001	20XAV11CT001	30XAV11CT001	LUBE OIL TANK TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
937	NA	10XAV11CT002	20XAV11CT002	30XAV11CT002	LUBE OIL BEFORE COOLER TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
938	NA	10XAV61CT001	20XAV61CT001	30XAV61CT001	GEAR BOX DRAIN TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
939	NA	10XAV61CT002	20XAV61CT002	30XAV61CT002	TURBINE F.J.B.+ T.B. DRAIN TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
940	NA	10XAV61CT003	20XAV61CT003	30XAV61CT003	TURBINME R.J.B. + COUPLING DRAIN TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
941	NA	10LBS64CT001	20LBS64CT001	30LBS64CT001	LIVE STEAM TEMPERATURE **(BFPDT-B)**	TC-K	0-500	DEG C	0	1	1	1
942	NA	10LBS64CT002	20LBS64CT002	30LBS64CT002	LIVE STEAM TEMPERATURE **(BFPDT-B)**	TC-K	0-500	DEG C	0	1	1	1
943	NA	10MAW61CT001	20MAW61CT001	30MAW61CT001	AUXILIARY STEAM TO GLAND STEAM TEMPERATURE **(BFPDT-B)**	TC-K	0-500	DEG C	0	1	1	1
944	NA	10MAW71CT001	20MAW71CT001	30MAW71CT001	GLAND STEAM TEMPERATURE **(BFPDT-B)**	TC-K	0-500	DEG C	0	1	1	1
945	NA	10XAL02CT001	20XAL02CT001	30XAL02CT001	TURBINE CASING DRAIN TEMPERATURE **(BFPDT-B)**	TC-K	0-400	DEG C	0	1	1	1
946	NA	10XAL02CT002	20XAL02CT002	30XAL02CT002	TURBINE CASING CROSS DRAIN TEMPERATURE **(BFPDT-B)**	TC-K	0-400	DEG C	0	1	1	1
947	NA	10XAL02CT003	20XAL02CT003	30XAL02CT003	TURBINE CASING DRAIN TEMPERATURE **(BFPDT-B)**	TC-K	0-400	DEG C	0	1	1	1
948	NA	10MTA02CT160	20MTA02CT160	30MTA02CT160	TURBINE EXHAUST HOOD TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
949	NA	10MTA02CT161	20MTA02CT161	30MTA02CT161	TURBINE EXHAUST HOOD TEMPERATURE **(BFPDT-B)**	RTD	0-120	DEG C	0	1	1	1
950	NA	10XAA52CT053	20XAA52CT053	30XAA52CT053	TURBINE 100% CASING TEMPERATURE **(BFPDT-B)**	TC-K	0-400	DEG C	0	1	1	1
951	NA	10LAB10CT020	20LAB10CT020	30LAB10CT020	BFP SUCT.FEED WATER TEMP. **(TDBFP-A)**	RTD	0-200	DEG C	0	1	1	1
952	NA	10LAB10CT023	20LAB10CT023	30LAB10CT023	BFP DISCH.FEED WATER TEMP. **(TDBFP-A)**	RTD	0-200	DEG C	0	1	1	1
953	NA	10LAB10CT024	20LAB10CT024	30LAB10CT024	BFP BARREL TEMP., TOP **(TDBFP-A)**	RTD	0-200	DEG C	0	1	1	1
954	NA	10LAB10CT025	20LAB10CT025	30LAB10CT025	BFP BARREL TEMP., BOTTOM **(TDBFP-A)**	RTD	0-200	DEG C	0	1	1	1
955	NA	10PGB10CT101	20PGB10CT101	30PGB10CT101	BP MECH SEAL COOLER-NDE S.W INLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
956	NA	10PGB10CT102	20PGB10CT102	30PGB10CT102	BP MECH SEAL COOLER-NDE S.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
957	NA	10PGB10CT103	20PGB10CT103	30PGB10CT103	BP MECH SEAL COOLER-DE S.W INLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
958	NA	10PGB10CT104	20PGB10CT104	30PGB10CT104	BP MECH SEAL COOLER-DE S.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
959	NA	10PGB10CT105	20PGB10CT105	30PGB10CT105	BFP MEC SEAL COOLER-DE S.W INLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
960	NA	10PGB10CT106	20PGB10CT106	30PGB10CT106	BFP MEC SEAL COOLER-DE S.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
961	NA	10PGB10CT107	20PGB10CT107	30PGB10CT107	BFP MEC SEAL COOLER-NDE S.W INLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
962	NA	10PGB10CT108	20PGB10CT108	30PGB10CT108	BFP MEC SEAL COOLER-NDE S.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
963	NA	10PGB10CT109	20PGB10CT109	30PGB10CT109	BP MECH SEAL COOLER-NDE C.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
964	NA	10PGB10CT110	20PGB10CT110	30PGB10CT110	BP MECH SEAL COOLER-DE C.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
965	NA	10PGB10CT111	20PGB10CT111	30PGB10CT111	BFP MEC SEAL COOLER-NDE C.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1

SL NO	COMMON AREA TAG	UNIT-1 AREA TAG	UNIT-2 AREA TAG	UNIT-3 AREA TAG	DESCRIPTION	SNSR TYPE	RANGE	RANGE UNIT	COMMON QTY	UNIT-1 QTY	UNIT-2 QTY	UNIT-3 QTY
966	NA	10PGB10CT112	20PGB10CT112	30PGB10CT112	BFP MEC SEAL COOLER-DE C.W OUTLET TEMP **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
967	NA	10LAC10CT105	20LAC10CT105	30LAC10CT105	OIL DRAIL TEMP BP JOUR BRG-NDE&TH BRG **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
968	NA	10LAC10CT106	20LAC10CT106	30LAC10CT106	OIL DRAIL TEMP BP JOURNAL BRG--DE **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
969	NA	10LAC10CT114	20LAC10CT114	30LAC10CT114	OIL DRAIL TEMP BFP JOURNAL BRG--DE **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
970	NA	10LAC10CT115	20LAC10CT115	30LAC10CT115	OIL DRAIL TEMP BFP JOUR BRG-NDE&TH BRG **(TDBFP-A)**	RTD	0-120	DEG C	0	1	1	1
971	NA	10LAB20CT020	20LAB20CT020	30LAB20CT020	BFP SUCT.FEED WATER TEMP. **(TDBFP-B)**	RTD	0-200	DEG C	0	1	1	1
972	NA	10LAB20CT023	20LAB20CT023	30LAB20CT023	BFP DISCH.FEED WATER TEMP. **(TDBFP-B)**	RTD	0-200	DEG C	0	1	1	1
973	NA	10LAB20CT024	20LAB20CT024	30LAB20CT024	BFP BARREL TEMP., TOP **(TDBFP-B)**	RTD	0-200	DEG C	0	1	1	1
974	NA	10LAB20CT025	20LAB20CT025	30LAB20CT025	BFP BARREL TEMP., BOTTOM **(TDBFP-B)**	RTD	0-200	DEG C	0	1	1	1
975	NA	10PGB20CT101	20PGB20CT101	30PGB20CT101	BP MECH SEAL COOLER-NDE S.W INLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
976	NA	10PGB20CT102	20PGB20CT102	30PGB20CT102	BP MECH SEAL COOLER-NDE S.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
977	NA	10PGB20CT103	20PGB20CT103	30PGB20CT103	BP MECH SEAL COOLER-DE S.W INLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
978	NA	10PGB20CT104	20PGB20CT104	30PGB20CT104	BP MECH SEAL COOLER-DE S.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
979	NA	10PGB20CT105	20PGB20CT105	30PGB20CT105	BFP MEC SEAL COOLER-DE S.W INLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
980	NA	10PGB20CT106	20PGB20CT106	30PGB20CT106	BFP MEC SEAL COOLER-DE S.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
981	NA	10PGB20CT107	20PGB20CT107	30PGB20CT107	BFP MEC SEAL COOLER-NDE S.W INLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
982	NA	10PGB20CT108	20PGB20CT108	30PGB20CT108	BFP MEC SEAL COOLER-NDE S.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
983	NA	10PGB20CT109	20PGB20CT109	30PGB20CT109	BP MECH SEAL COOLER-NDE C.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
984	NA	10PGB20CT110	20PGB20CT110	30PGB20CT110	BP MECH SEAL COOLER-DE C.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
985	NA	10PGB20CT111	20PGB20CT111	30PGB20CT111	BFP MEC SEAL COOLER-NDE C.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
986	NA	10PGB20CT112	20PGB20CT112	30PGB20CT112	BFP MEC SEAL COOLER-DE C.W OUTLET TEMP **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
987	NA	10LAC20CT105	20LAC20CT105	30LAC20CT105	OIL DRAIL TEMP BP JOUR BRG-NDE&TH BRG **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
988	NA	10LAC20CT106	20LAC20CT106	30LAC20CT106	OIL DRAIL TEMP BP JOURNAL BRG--DE **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
989	NA	10LAC20CT114	20LAC20CT114	30LAC20CT114	OIL DRAIL TEMP BFP JOURNAL BRG--DE **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
990	NA	10LAC20CT115	20LAC20CT115	30LAC20CT115	OIL DRAIL TEMP BFP JOUR BRG-NDE&TH BRG **(TDBFP-B)**	RTD	0-120	DEG C	0	1	1	1
991	NA	10LAB30CT020	20LAB30CT020	30LAB30CT020	BFP SUCT.FEED WATER TEMP. **(MDBFP)**	RTD	0-200	DEG C	0	1	1	1
992	NA	10LAB30CT023	20LAB30CT023	30LAB30CT023	BFP DISCH.FEED WATER TEMP. **(MDBFP)**	RTD	0-200	DEG C	0	1	1	1
993	NA	10LAB30CT024	20LAB30CT024	30LAB30CT024	BFP BARREL TEMP., TOP **(MDBFP)**	RTD	0-200	DEG C	0	1	1	1
994	NA	10LAB30CT025	20LAB30CT025	30LAB30CT025	BFP BARREL TEMP., BOTTOM **(MDBFP)**	RTD	0-200	DEG C	0	1	1	1
995	NA	10PGB30CT101	20PGB30CT101	30PGB30CT101	BP MECH SEAL COOLER-NDE S.W INLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
996	NA	10PGB30CT102	20PGB30CT102	30PGB30CT102	BP MECH SEAL COOLER-NDE S.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
997	NA	10PGB30CT103	20PGB30CT103	30PGB30CT103	BP MECH SEAL COOLER-DE S.W INLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
998	NA	10PGB30CT104	20PGB30CT104	30PGB30CT104	BP MECH SEAL COOLER-DE S.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
999	NA	10PGB30CT105	20PGB30CT105	30PGB30CT105	BFP MEC SEAL COOLER-DE S.W INLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1000	NA	10PGB30CT106	20PGB30CT106	30PGB30CT106	BFP MEC SEAL COOLER-DE S.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1001	NA	10PGB30CT107	20PGB30CT107	30PGB30CT107	BFP MEC SEAL COOLER-NDE S.W INLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1002	NA	10PGB30CT108	20PGB30CT108	30PGB30CT108	BFP MEC SEAL COOLER-NDE S.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1003	NA	10PGB30CT109	20PGB30CT109	30PGB30CT109	BP MECH SEAL COOLER-NDE C.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1004	NA	10PGB30CT110	20PGB30CT110	30PGB30CT110	BP MECH SEAL COOLER-DE C.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1005	NA	10PGB30CT111	20PGB30CT111	30PGB30CT111	BFP MEC SEAL COOLER-NDE C.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1006	NA	10PGB30CT112	20PGB30CT112	30PGB30CT112	BFP MEC SEAL COOLER-DE C.W OUTLET TEMP **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1007	NA	10LAC30CT107	20LAC30CT107	30LAC30CT107	OIL DRAIL TEMP BP JOUR BRG-NDE&TH BRG **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1008	NA	10LAC30CT108	20LAC30CT108	30LAC30CT108	OIL DRAIL TEMP BP JOURNAL BRG--DE **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1009	NA	10LAC30CT114	20LAC30CT114	30LAC30CT114	OIL DRAIL TEMP BFP JOURNAL BRG--DE **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
1010	NA	10LAC30CT115	20LAC30CT115	30LAC30CT115	OIL DRAIL TEMP BFP JOUR BRG-NDE&TH BRG **(MDBFP)**	RTD	0-120	DEG C	0	1	1	1
									12	**998**	**980**	**980**

MAHAGENCO CHANDRAPUR U-5 & 6 R&M - BOM OF SINGLE INPUT DIN RAIL MOUNTED TEMPERATURE TRANSMITTERS

Sr. No.	UNIT-5 TAG NO.	UNIT-6 TAG NO.	Description	Range	Type	UNIT-5 QTY	UNIT-6 QTY
1	05-TT620A1X	06-TT620A1X	DEARATOR I/L CONDENSATE TEMP	0-200°C	RTD	1	1
2	05-TT423A1A	06-TT423A1A	HPH-5A DRAIN TEMP	0-250°C	RTD	1	1
3	05-TT423A1B	06-TT423A1B	HPH-5B DRAIN TEMP	0-250°C	RTD	1	1
4	05-TT426A1A	06-TT426A1A	BFP-A STM TEMP AT TUR I/L	0-400°C	TC-K	1	1
5	05-TT426A1B	06-TT426A1B	BFP-B STM TEMP AT TUR I/L	0-400°C	TC-K	1	1
6	05-TT-112A1A	06-TT-112A1A	FLUE GAS TEMP AT PAH-A I/L	0-500°C	TC-K	1	1
7	05-TT-112E1A	06-TT-112E1A	FLUE GAS TEMP AT PAH-A I/L	0-500°C	TC-K	1	1
8	05-TE112B1A	06-TE112B1A	FLUE GAS TEMP AT PAH-A I/L	0-500°C	TC-K	1	1
9	05-TE112C1A	06-TE112C1A	FLUE GAS TEMP AT PAH-A I/L	0-500°C	TC-K	1	1
10	05-TE112D1A	06-TE112D1A	FLUE GAS TEMP AT PAH-A I/L	0-500°C	TC-K	1	1
11	05-TT-110A1A	06-TT-110A1A	FLUE GAS TEMP AT PAH-A O/L	0-250°C	TC-K	1	1
12	05-TT-110E1A	06-TT-110E1A	FLUE GAS TEMP AT PAH-A O/L	0-250°C	TC-K	1	1
13	05-TE110B1A	06-TE110B1A	FLUE GAS TEMP AT PAH-A O/L	0-250°C	TC-K	1	1
14	05-TE110C1A	06-TE110C1A	FLUE GAS TEMP AT PAH-A O/L	0-250°C	TC-K	1	1
15	05-TE110D1A	06-TE110D1A	FLUE GAS TEMP AT PAH-A O/L	0-250°C	TC-K	1	1
16	05-TT-306A1A	06-TT-306A1A	PRIMARY AIR TEMP AT PAH-A I/L	0-150°C	TC-K	1	1
17	05-TT-306E1A	06-TT-306E1A	PRIMARY AIR TEMP AT PAH-A I/L	0-150°C	TC-K	1	1
18	05-TE306F1A	06-TE306F1A	PRIMARY AIR TEMP AT PAH-A I/L	0-150°C	TC-K	1	1
19	05-TE306G1A	06-TE306G1A	PRIMARY AIR TEMP AT PAH-A I/L	0-150°C	TC-K	1	1
20	05-TE306H1A	06-TE306H1A	PRIMARY AIR TEMP AT PAH-A I/L	0-150°C	TC-K	1	1
21	05-TT-308A1A	06-TT-308A1A	PRIMARY AIR TEMP AT PAH-A O/L	0-500°C	TC-K	1	1
22	05-TT-308E1A	06-TT-308E1A	PRIMARY AIR TEMP AT PAH-A O/L	0-500°C	TC-K	1	1
23	05-TE308B1A	06-TE308B1A	PRIMARY AIR TEMP AT PAH-A O/L	0-500°C	TC-K	1	1
24	05-TE308C1A	06-TE308C1A	PRIMARY AIR TEMP AT PAH-A O/L	0-500°C	TC-K	1	1
25	05-TE308D1A	06-TE308D1A	PRIMARY AIR TEMP AT PAH-A O/L	0-500°C	TC-K	1	1
26	05-TT-112A1B	06-TT-112A1B	FLUE GAS TEMP AT PAH-B I/L	0-500°C	TC-K	1	1
27	05-TT-112E1B	06-TT-112E1B	FLUE GAS TEMP AT PAH-B I/L	0-500°C	TC-K	1	1
28	05-TE112B1B	06-TE112B1B	FLUE GAS TEMP AT PAH-B I/L	0-500°C	TC-K	1	1
29	05-TE112C1B	06-TE112C1B	FLUE GAS TEMP AT PAH-B I/L	0-500°C	TC-K	1	1
30	05-TE112D1B	06-TE112D1B	FLUE GAS TEMP AT PAH-B I/L	0-500°C	TC-K	1	1
31	05-TT-110A1B	06-TT-110A1B	FLUE GAS TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
32	05-TT-110A1B	06-TT-110A1B	FLUE GAS TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
33	05-TE110B1B	06-TE110B1B	FLUE GAS TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
34	05-TE110C1B	06-TE110C1B	FLUE GAS TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
35	05-TE110D1B	06-TE110D1B	FLUE GAS TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
36	05-TT-306A1B	06-TT-306A1B	PRIMARY AIR TEMP AT PAH-B I/L	0-150°C	TC-K	1	1
37	05-TT-306E1B	06-TT-306E1B	PRIMARY AIR TEMP AT PAH-B I/L	0-150°C	TC-K	1	1
38	05-TE306F1B	06-TE306F1B	PRIMARY AIR TEMP AT PAH-B I/L	0-150°C	TC-K	1	1
39	05-TE306G1B	06-TE306G1B	PRIMARY AIR TEMP AT PAH-B I/L	0-150°C	TC-K	1	1
40	05-TE306H1B	06-TE306H1B	PRIMARY AIR TEMP AT PAH-B I/L	0-150°C	TC-K	1	1
41	05-TT-308A1B	06-TT-308A1B	PRIMARY AIR TEMP AT PAH-B O/L	0-500°C	TC-K	1	1
42	05-TT-308E1B	06-TT-308E1B	PRIMARY AIR TEMP AT PAH-B O/L	0-500°C	TC-K	1	1
43	05-TE308B1B	06-TE308B1B	PRIMARY AIR TEMP AT PAH-B O/L	0-500°C	TC-K	1	1
44	05-TE308C1B	06-TE308C1B	PRIMARY AIR TEMP AT PAH-B O/L	0-500°C	TC-K	1	1
45	05-TE308D1B	06-TE308D1B	PRIMARY AIR TEMP AT PAH-B O/L	0-500°C	TC-K	1	1
46	05-TT-109A1A	06-TT-109A1A	FG TEMP AT SAH-A I/L	0-500°C	TC-K	1	1
47	05-TT-109E1A	06-TT-109E1A	FG TEMP AT SAH-A I/L	0-500°C	TC-K	1	1
48	05-TE109B1A	06-TE109B1A	FG TEMP AT SAH-A I/L	0-500°C	TC-K	1	1
49	05-TE109C1A	06-TE109C1A	FG TEMP AT SAH-A I/L	0-500°C	TC-K	1	1
50	05-TE109D1A	06-TE109D1A	FG TEMP AT SAH-A I/L	0-500°C	TC-K	1	1
51	05-TT-107A1A	06-TT-107A1A	FG TEMP AT SAH-A O/L	0-250°C	TC-K	1	1
52	05-TT-107E1A	06-TT-107E1A	FG TEMP AT SAH-A O/L	0-250°C	TC-K	1	1
53	05-TE107F1A	06-TE107F1A	FG TEMP AT SAH-A O/L	0-250°C	TC-K	1	1
54	05-TE107G1A	06-TE107G1A	FG TEMP AT SAH-A O/L	0-250°C	TC-K	1	1
55	05-TE107H1A	06-TE107H1A	FG TEMP AT SAH-A O/L	0-250°C	TC-K	1	1

Sr. No.	UNIT-5 TAG NO.	UNIT-6 TAG NO.	Description	Range	Type	UNIT-5 QTY	UNIT-6 QTY
56	05-TT-130A1A	06-TT-130A1A	SECONDARY AIR TEMP AT SAH-A I/L	0-150°C	TC-K	1	1
57	05-TT-130E1A	06-TT-130E1A	SECONDARY AIR TEMP AT SAH-A I/L	0-150°C	TC-K	1	1
58	05-TE130B1A	06-TE130B1A	SECONDARY AIR TEMP AT SAH-A I/L	0-150°C	TC-K	1	1
59	05-TE130C1A	06-TE130C1A	SECONDARY AIR TEMP AT SAH-A I/L	0-150°C	TC-K	1	1
60	05-TE130D1A	06-TE130D1A	SECONDARY AIR TEMP AT SAH-A I/L	0-150°C	TC-K	1	1
61	05-TT-132A1B	06-TT-132A1B	SECONDARY AIR TEMP AT SAH-B 0/L	0-450°C	TC-K	1	1
62	05-TT-132E1B	06-TT-132E1B	SECONDARY AIR TEMP AT SAH-B 0/L	0-450°C	TC-K	1	1
63	05-TE132B1B	06-TE132B1B	SECONDARY AIR TEMP AT SAH-B 0/L	0-450°C	TC-K	1	1
64	05-TE132C1B	06-TE132C1B	SECONDARY AIR TEMP AT SAH-B 0/L	0-450°C	TC-K	1	1
65	05-TE132D1B	06-TE132D1B	SECONDARY AIR TEMP AT SAH-B 0/L	0-450°C	TC-K	1	1
66	05-TT-109A1B	06-TT-109A1B	SECONDARY AIR TEMP AT SAH-B I/L	0-500°C	TC-K	1	1
67	05-TT-109E1B	06-TT-109E1B	SECONDARY AIR TEMP AT SAH-B I/L	0-500°C	TC-K	1	1
68	05-TE109B1B	06-TE109B1B	SECONDARY AIR TEMP AT SAH-B I/L	0-500°C	TC-K	1	1
69	05-TE109C1B	06-TE109C1B	SECONDARY AIR TEMP AT SAH-B I/L	0-500°C	TC-K	1	1
70	05-TE109D1B	06-TE109D1B	SECONDARY AIR TEMP AT SAH-B I/L	0-500°C	TC-K	1	1
71	05-TT-110E1B	06-TT-110E1B	FG TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
72	05-TE110F1B	06-TE110F1B	FG TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
73	05-TE110G1B	06-TE110G1B	FG TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
74	05-TE110H1B	06-TE110H1B	FG TEMP AT PAH-B O/L	0-250°C	TC-K	1	1
75	05-TT-130A1B	06-TT-130A1B	SECONDARY AIR TEMP AT SAH-B I/L	0-150°C	TC-K	1	1
76	05-TT-130E1B	06-TT-130E1B	SECONDARY AIR TEMP AT SAH-B I/L	0-150°C	TC-K	1	1
77	05-TE130B1B	06-TE130B1B	SECONDARY AIR TEMP AT SAH-B I/L	0-150°C	TC-K	1	1
78	05-TE130C1B	06-TE130C1B	SECONDARY AIR TEMP AT SAH-B I/L	0-150°C	TC-K	1	1
79	05-TE130D1B	06-TE130D1B	SECONDARY AIR TEMP AT SAH-B I/L	0-150°C	TC-K	1	1
80	05-TT-314A1A	06-TT-314A1A	PRIMARY AIR TEMP-MILL-A	0-450°C	TC-K	1	1
81	05-TT-314A1B	06-TT-314A1B	PRIMARY AIR TEMP-MILL-B	0-450°C	TC-K	1	1
82	05-TT-314A1C	06-TT-314A1C	PRIMARY AIR TEMP-MILL-C	0-450°C	TC-K	1	1
83	05-TT-314A1D	06-TT-314A1D	PRIMARY AIR TEMP-MILL-D	0-450°C	TC-K	1	1
84	05-TT-314A1E	06-TT-314A1E	PRIMARY AIR TEMP-MILL-E	0-450°C	TC-K	1	1
85	05-TT-314A1F	06-TT-314A1F	PRIMARY AIR TEMP-MILL-F	0-450°C	TC-K	1	1
86	05-TT-314A1G	06-TT-314A1G	PRIMARY AIR TEMP-MILL-G	0-450°C	TC-K	1	1
87	05-TT-314A1H	06-TT-314A1H	PRIMARY AIR TEMP-MILL-H	0-450°C	TC-K	1	1
88	05-TT-132A1A	06-TT-132A1A	SECONDARY AIR TEMP AT SAH-A O/L	0-450°C	TC-K	1	1
89	05-TT-132E1A	06-TT-132E1A	SECONDARY AIR TEMP AT SAH-A O/L	0-450°C	TC-K	1	1
90	05-TE132 B1A	06-TE132 B1A	SECONDARY AIR TEMP AT SAH-A O/L	0-450°C	TC-K	1	1
91	05-TE132 C1A	06-TE132 C1A	SECONDARY AIR TEMP AT SAH-A O/L	0-450°C	TC-K	1	1
92	05-TE132 D1A	06-TE132 D1A	SECONDARY AIR TEMP AT SAH-A O/L	0-450°C	TC-K	1	1
93	05-TT416A1X	06-TT416A1X	FEED WATER TEMP AT ECONOMISER I/L	0-750°C	TC-K	1	1
94	05-TT418A1L	06-TT418A1L	FEED WATER TEMP AT ECONOMISER O/L(L)	0-400°C	TC-K	1	1
95	05-TT418A1R	06-TT418A1R	FEED WATER TEMP AT ECONOMISER O/L(R)	0-400°C	TC-K	1	1
96	05-TT511A1X	06-TT511A1X	HPBP	0-600°C	TC-K	1	1
97	05-TT512A1X	06-TT512A1X	HPBP STREAM 1 TEMP BEFORE HPBP STATION	0-600°C	TC-K	1	1
98	05-TT513A1X	06-TT513A1X	HPBP STREAM 2 TEMP BEFORE HPBP STATION	0-600°C	TC-K	1	1
99	05-TT517A1R	06-TT517A1R	COLD HEAT STEAM TEMP AFTER DESH(R)	0-500°C	TC-K	1	1
100	05-TT517B1R	06-TT517B1R	COLD HEAT STEAM TEMP AFTER DESH (R)	0-500°C	TC-K	1	1
101	05-TT517A1L	06-TT517A1L	COLD HEAT STEAM TEMP AFTER DESH(L)	0-500°C	TC-K	1	1
102	05-TT517B1L	06-TT517B1L	COLD HEAT STEAM TEMP AFTER DESH (L)	0-500°C	TC-K	1	1
103	05-TT515A1R	06-TT515A1R	COLD HEAT STEAM TEMP BEFORE DESH(R)	0-500°C	TC-K	1	1
104	05-TT515B1R	06-TT515B1R	COLD HEAT STEAM TEMP BEFORE DESH (R)	0-500°C	TC-K	1	1
105	05-TT515A1L	06-TT515A1L	COLD HEAT STEAM TEMP BEFORE DESH(L)	0-500°C	TC-K	1	1
106	05-TT515B1L	06-TT515B1L	COLD HEAT STEAM TEMP BEFORE DESH (L)	0-500°C	TC-K	1	1
107	05-TT508A1R	06-TT508A1R	BOILER O/L STEAM TEMP (R)	0-600°C	TC-K	1	1
108	05-TT508B1R	06-TT508B1R	BOILER O/L STEAM TEMP(R)	0-600°C	TC-K	1	1
109	05-TT508A1L	06-TT508A1L	BOILER O/L STEAM TEMP (L)	0-600°C	TC-K	1	1
110	05-TT508B1L	06-TT508B1L	BOILER O/L STEAM TEMP(L)	0-600°C	TC-K	1	1
111	05-TT519A1R	06-TT519A1R	REHEAT STEAM O/L TEMP(R)	0-600°C	TC-K	1	1
112	05-TT519B1R	06-TT519B1R	REHEAT STEAM O/L TEMP(R)	0-600°C	TC-K	1	1
113	05-TT519A1L	06-TT519A1L	REHEAT STEAM O/L TEMP(L)	0-600°C	TC-K	1	1

Sr. No.	UNIT-5 TAG NO.	UNIT-6 TAG NO.	Description	Range	Type	UNIT-5 QTY	UNIT-6 QTY
114	05-TT519B1L	06-TT519B1L	REHEAT STEAM O/L TEMP(L)	0-600°C	TC-K	1	1
115	05-TT503A1R	06-TT503A1R	SUPER HEAT STEAM TEMP AFTER DESH(R)	0-600°C	TC-K	1	1
116	05-TT503B1R	06-TT503B1R	SUPER HEAT STEAM TEMP AFTER DESH(R)	0-600°C	TC-K	1	1
117	05-TT503A1L	06-TT503A1L	SUPER HEAT STEAM TEMP AFTER DESH(L)	0-600°C	TC-K	1	1
118	05-TT503B1L	06-TT503B1L	SUPER HEAT STEAM TEMP AFTER DESH(L)	0-600°C	TC-K	1	1
119	05-TT502A1R	06-TT502A1R	SUPER HEAT STEAM TEMP BEFORE DESH(R)	0-600°C	TC-K	1	1
120	05-TT502B1R	06-TT502B1R	SUPER HEAT STEAM TEMP BEFORE DESH(R)	0-600°C	TC-K	1	1
121	05-TT502A1L	06-TT502A1L	SUPER HEAT STEAM TEMP BEFORE DESH(L)	0-600°C	TC-K	1	1
122	05-TT502B1L	06-TT502B1L	SUPER HEAT STEAM TEMP BEFORE DESH(L)	0-600°C	TC-K	1	1
123	05-TT329A1A	06-TT329A1A	MILL-A OUTLET TEMP	0-100°C	TC-K	1	1
124	05-TT329B1A	06-TT329B1A	MILL-A OUTLET TEMP	0-100°C	TC-K	1	1
125	05-TT329A1B	06-TT329A1B	MILL-B OUTLET TEMP	0-100°C	TC-K	1	1
126	05-TT329B1B	06-TT329B1B	MILL-B OUTLET TEMP	0-100°C	TC-K	1	1
127	05-TT329A1C	06-TT329A1C	MILL-C OUTLET TEMP	0-100°C	TC-K	1	1
128	05-TT329B1C	06-TT329B1C	MILL-C OUTLET TEMP	0-100°C	TC-K	1	1
129	05-TT329A1D	06-TT329A1D	MILL-D OUTLET TEMP	0-100°C	TC-K	1	1
130	05-TT329B1D	06-TT329B1D	MILL-D OUTLET TEMP	0-100°C	TC-K	1	1
131	05-TT329A1E	06-TT329A1E	MILL-E OUTLET TEMP	0-100°C	TC-K	1	1
132	05-TT329B1E	06-TT329B1E	MILL-E OUTLET TEMP	0-100°C	TC-K	1	1
133	05-TT329A1F	06-TT329A1F	MILL-F OUTLET TEMP	0-100°C	TC-K	1	1
134	05-TT329B1F	06-TT329B1F	MILL-F OUTLET TEMP	0-100°C	TC-K	1	1
135	05-TT329A1G	06-TT329A1G	MILL-G OUTLET TEMP	0-100°C	TC-K	1	1
136	05-TT329B1G	06-TT329B1G	MILL-G OUTLET TEMP	0-100°C	TC-K	1	1
137	05-TT329A1H	06-TT329A1H	MILL-H OUTLET TEMP	0-100°C	TC-K	1	1
138	05-TT329B1H	06-TT329B1H	MILL-H OUTLET TEMP	0-100°C	TC-K	1	1
139	05-TT 04.20 1M	06-TT 04.20 1M	HPBP STREAM 1 TEMP	100-450°C	TC-K	1	1
140	05-TT 04.20 1R	06-TT 04.20 1R	HPBP STREAM 1 TEMP	100-450°C	TC-K	1	1
141	05-TT 04.19 1M	06-TT 04.19 1M	HPBP STREAM 2 TEMP	100-450°C	TC-K	1	1
142	05-TT 04.19 1R	06-TT 04.19 1R	HPBP STREAM 2 TEMP	100-450°C	TC-K	1	1
143	05-TT03.19/M	06-TT03.19/M	PRDS	**0-250°C**	RTD	1	1
144	05-TT03.19/R	06-TT03.19/R	PRDS	**0-250°C**	RTD	1	1
145	05-TT150AIX	06-TT150AIX	AUXILIARY STEAM TEMP AFTER PRDS	0-500°C	TC-K	1	1
146	05-TT561AXX	06-TT561AXX	AUXILIARY STEAM TEMP	0-300°C	TC-K	1	1
147	05-TT134A1R	06-TT134A1R	Secondary Air Flow Compensation	0-450°C	TC-K	1	1
148	05-TT134B1R	06-TT134B1R	Secondary Air Flow Compensation	0-450°C	TC-K	1	1
149	05-TT134A1R	06-TT134A1R	Secondary Air Flow Compensation	0-450°C	TC-K	1	1
150	05-TT134B1R	06-TT134B1R	Secondary Air Flow Compensation	0-450°C	TC-K	1	1
151	05-TT403AIX	06-TT403AIX	BFP-A Suction Flow Compensation	0-400°C	TC-K	1	1
152	05-TT403BIX	06-TT403BIX	BFP-B Suction Flow Compensation	0-400°C	TC-K	1	1
153	05-TT403CIX	06-TT403CIX	BFP-C Suction Flow Compensation	0-400°C	TC-K	1	1
154	05-TT403DIX	06-TT403DIX	BFP-D Suction Flow Compensation	0-400°C	TC-K	1	1
155	05-TT406A1X	06-TT406A1X	SH Attemperator Temp. Before Computation	0-250°C	TC-K	1	1
156	05-TT651A1X	06-TT651A1X	Drain Flash Tank Temp.-A	0-600°C	TC-K	1	1
157	05-TT650A1X	06-TT650A1X	Drain Flash Tank Temp.-B	0-600°C	TC-K	1	1
158	05-TT316A1X	06-TT316A1X	Motor Cavity Temperature BCW-A	0-150°C	TC-K	1	1
159	05-TT316B1X	06-TT316B1X	Motor Cavity Temperature BCW-B	0-150°C	TC-K	1	1
160	05-TT316C1X	06-TT316C1X	Motor Cavity Temperature BCW-C	0-150°C	TC-K	1	1
161	05-TT315A1X	06-TT315A1X	Motor Cavity Temperature BCW-A	0-150°C	TC-K	1	1
162	05-TT315B1X	06-TT315B1X	Motor Cavity Temperature BCW-B	0-150°C	TC-K	1	1
163	05-TT315C1X	06-TT315C1X	Motor Cavity Temperature BCW-C	0-150°C	TC-K	1	1
164	05-TT-01	06-TT-01	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
165	05-TT-02	06-TT-02	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
166	05-TT-03	06-TT-03	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
167	05-TT-04	06-TT-04	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
168	05-TT-05	06-TT-05	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
169	05-TT-06	06-TT-06	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
170	05-TT-07	06-TT-07	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
171	05-TT-08	06-TT-08	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1

Sr. No.	UNIT-5 TAG NO.	UNIT-6 TAG NO.	Description	Range	Type	UNIT-5 QTY	UNIT-6 QTY
172	05-TT-09	06-TT-09	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
173	05-TT-10	06-TT-10	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
174	05-TT-11	06-TT-11	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
175	05-TT-12	06-TT-12	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
176	05-TT-13	06-TT-13	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
177	05-TT-14	06-TT-14	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
178	05-TT-15	06-TT-15	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
179	05-TT-16	06-TT-16	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
180	05-TT-17	06-TT-17	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
181	05-TT-18	06-TT-18	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
182	05-TT-19	06-TT-19	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
183	05-TT-20	06-TT-20	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
184	05-TT-21	06-TT-21	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
185	05-TT-22	06-TT-22	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
186	05-TT-23	06-TT-23	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
187	05-TT-24	06-TT-24	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
188	05-TT-25	06-TT-25	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
189	05-TT-26	06-TT-26	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1
190	05-TT-27	06-TT-27	THERMOCOUPLE MEASUREMENT	0-600°C	TC-K	1	1

STANDARD QUALITY PLAN
FOR
TEMPERATURE TRANSMITTERS
(SINGLE INPUT DIN Rail type)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED	ISSUED	DATE
Sandeep	416	19/10/2023

Customer:	Manufacturer's Name & address:-	MANUFACTURING QUALITY PLAN		Project:
		ITEM: TEMPERATURE TRANSMITTER,	Revision No: 00 Date:	Contractor: **M/s BHEL-EDN,** End User :

Sl.No	Components & Operations	Characteristics	Class	Type of Check	Quantum of Check		Reference Documents	Acceptance Norms	Format of Record		Agency			Remarks
					M	C/N					M	C	N	
1	2	3	4	5	6a	6b	7	8	9	D*	10			11
1.00	**Raw Materials**													
1	Raw Materials & Components (Housing, Electronic & other components)	a) Material properties, Size, Rating, Make, Type/Model No.	Major	Internal Test/ Checks	As per Manufacturer's Standard	–	Purchase Order Specification / Manufacturers Catalogues / Mfr Drawing	Purchase Order Specification / Manufacturers Catalogues / Mfr Drawing	Internal Records	–	P	–	–	
2.00	**In Process Inspection**													
2	Assembly & Fitting	a) Soundness of Fitting, Connections & Terminals Marking	Major	Verification	100%	–	Purchase Order Specification / Manufacturers Catalogues / Drawing	Purchase Order Specification / Manufacturers Catalogues / Drawing	Internal Records	–	P	–	–	
3.00	**Final Inspection**													
3	Routine Test	a) Dimensional details & Visual checking (Size, Rating, Make, Type/ Model No., Serial No./ Tag)	Major	Measurement / Visual	100%	10%	Approved Drawing / Approved Dataseet / NTPC Specifications / Manufacturers Catalogues	Approved Drawing/ Approved Dataseet / NTPC Specifications / Manufacturers Catalogues	TC	✓	P	V/W	V/W	
		b) Calibration Check (at 3 point) for Accuracy ,	Critical	Measurement	100%	10%	- do-	- do-	TC	✓	P	V/W	V/W	Communication for HART Protocol shall be checked during Calibration

Customer:	Manufacturer's Name & address:-	MANUFACTURING QUALITY PLAN		Project:
		ITEM: TEMPERATURE TRANSMITTER,	Revision No: 00 Date:	Contractor: **M/s BHEL-EDN,** End User :

Sl.No	Components & Operations	Characteristics	Class	Type of Check	Quantum of Check		Reference Documents	Acceptance Norms	Format of Record		Agency			Remarks
					M	C/N					M	C	N	
1	2	3	4	5	6a	6b	7	8	9	D*	10			11
		c) Review of Test and Calibration certificates	Major	Review	100%	–	- do-	- do-	TC	✓	P	V	V	
4.00	**Packing & Dispatch**													
		a) Completeness of TC's, COC's, Inspection Reports.	Major	Verification	100%	–	Ord Specn & QP	Ord Specn & QP	Documents	–	P	–	–	
		b) Identification Marking / Tagging of each instrument	Major	Verification	100%	–	Ord Specn	Ord Specn	Internal Records	–	P	–	–	
		c) Soundness of Packing against Transit	Major	Verification	100%	–	Ord Specn	Ord Specn	Internal Records	–	P	–	–	

Manufacturer/ Sub contractor:	Contractor: M/s. BHEL-EDN, Bangalore	**LEGEND:**	For Customer use:-	
Signature & Date	Signature & Date	* Records identified ✓ with shall be essentially included by the contractor in QA documentation. **M: Manufacturer / Sub contractor, C**: Contractor /Nominated inspection agency, **N**: Customer Indicate " **P** " – Perform, " **W** " – Witness & " **V** "– Verification	Reviewed By Name & Sign of approving authority & Seal	

NTPC	**CORPORATE QUALITY ASSURANCE/ कॉरपोरेट गुणवत्ता आश्ववासन** **SUB-VENDOR QUESTIONNAIRE/ सब-वेंडर प्रश्नावली**

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

	में बिक्री सेवा की स्थापना के बाद, विदेशी उप-विक्रेता के मामले में(स्थल , संपर्क व्यक्ति, संपर्क विवरण आदि)	***Details attached at Annexure – F2.4*** विवरण अनुलग्नक -2.4 पर संलग्न है।
9.	***Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any*** फ्लोचार्ट सहित विनिर्माण प्रक्रिया निष्पादन योजना , जिसमें आउटसोर्स प्रक्रिया, यदि कोई हो, सहित कच्चे माल से तैयार उत्पाद तक विनिर्माण के विभिन्न चरणों को दर्शाया गया हो,	***Details attached at Annexure – F2.5*** विवरण अनुलग्नक - F2.5में संलग्न है।
10.	***Sources of Raw Material/Major Bought Out Item*** कच्चे माल के स्रोत / खरीदे हुए मुख्य मद	***Details attached at Annexure – F2.6*** विवरण अनुलग्नक - F2.6में संलग्न है।
11.	***Quality Control exercised during receipt of raw material/BOI, in-process , Final Testing, packing*** कच्चे माल / खरीदे हुए मद, प्रक्रियाबद्ध, अंतिम परीक्षण, पैकिंग करते समय गुणवत्ता नियंत्रण	***Details attached at Annexure – F2.7*** विवरण अनुलग्नक - F2.7 पर संलग्न है
12.	***Manufacturing facilities*** ***(List of machines, special process facilities, material handling etc.)*** विनिर्माण सुविधा(मशीनों की सूची , विशेष प्रक्रिया सुविधाएं, सामग्री रख-रखाव आदि)	***Details attached at Annexure – F2.8*** विवरण अनुलग्नक - F2.8में संलग्न है।
13.	***Testing facilities (List of testing equipment)*** परीक्षण सुविधाएं(परीक्षण उपकरण की सूची)	***Details attached at Annexure – F2.9*** विवरण अनुलग्नक – F2. 9 में संलग्न है।
14.	***If manufacturing process involves fabrication then-*** यदि निर्माण प्रक्रिया में फेब्रिकेशन की गई है तो- ***List of qualified Welders*** पात्र वेल्डर की सूची ***List of qualified NDT personnel with area of specialization*** विशेषज्ञता के क्षेत्र सहित पात्र एनडीटी कार्मिकों की सूची	***Applicable / Not applicable*** लागू / लागू नहीं ***Details attached at Annexure – F2.10*** विवरण अनुलग्नक - F2.10में संलग्न है। ***(if applicable)*** लागू / लागू नहीं
15.	***List of out-sourced manufacturing processes with Sub-Vendors' names & addresses*** सब-वेंडर द्वारा बाह्य स्रोतों (उनके नाम और पते सहित)से करवाएं गए निर्माण प्रक्रियाओं की सूची	***Applicable / Not applicable*** लागू / लागू नहीं ***Details attached at Annexure. –F2.11*** विवरण अनुलग्नक - F2.10में संलग्न है। ***(if applicable)*** (यदि लागू हो)
16.	***Supply reference list including recent supplies*** नवीनतम आपूर्ति सहित आपूर्ति संदर्भ सूची	***Details attached at Annexure – F2.12*** विवरण अनुलग्नक - F2.12 में संलग्न है। ***(as per format given below)*** (नीचे दिए गए प्रारूप के अनुसार)

Project/ package परियोजना /पैकेज	***Customer Name*** ग्राहक का नाम	***Supplied Item (Type/Rating/Model /Capacity/Size etc)*** आपूर्ति की गई वस्तु (प्रकार / रेटिंग / मॉडल / क्षमता / आकार आदि)	***PO ref no/date*** पीओ संदर्भ सं. / तिथि	***Supplied Quantity*** आपूर्ति की मात्रा	***Date of Supply*** आपूर्ति की तारीख

17.	***Product satisfactory performance feedback letter/certificates/End User Feedback*** उत्पाद के संतोषजनक प्रदर्शन संबंधी फीडबैक पत्र / प्रमाण पत्र / अंतिम उपयोगकर्ता फ़ीडबैक	***Attached at annexure - F2.13*** अनुलग्नक F2. 3पर संलग्न है
18.	***Summary of Type Test Report (Type Test Details, Report No, Agency, Date of testing) for the proposed product***	***Applicable / Not applicable*** लागू / लागू नहीं

	(similar or higher rating) प्रस्तावित उत्पाद (एक समान या उच्च रेटिंग वाले) के लिए टाइप टेस्ट रिपोर्ट (टाइप टेस्ट विवरण, रिपोर्ट संख्या, एजेंसी, जांच की तारीख) का सारांश नोट: - रिपोर्ट प्रस्तुत करने की आवश्यकता नहीं है ***Note:- Reports need not to be submitted***	***Details attached at Annexure – F2.14*** विवरण अनुलग्नक - F2.1 4में संलग्न है ***(if applicable)*** (यदि लागू हो)
19.	***Statutory / mandatory certification for the proposed product*** प्रस्तावित उत्पाद के लिए वैधानिक / अनिवार्य प्रमाणीकरण	***Applicable / Not applicable*** लागू / लागू नहीं ***Details attached at Annexure – F2.15*** ***(if applicable)*** (यदि लागू हो)
20.	***Copy of ISO 9001 certificate*** आईएसओ 9001 प्रमाण पत्र की प्रति ***(if available***(यदि उपलब्ध हो)	***Attached at Annexure – F2.16*** अनुलग्नक में संलग्न - F2.1 6 है
21.	***Product technical catalogues for proposed item (if available)*** प्रस्तावित मद के लिए उत्पाद तकनीकी कैटलॉग (यदि उपलब्ध हो)	***Details attached at Annexure – F2.17*** विवरण अनुलग्नक - F2.1 7 में संलग्न है

Name: *नाम:*		***Desig:*** *पदः*		***Sign:*** *हस्ताक्षर:*		***Date:*** *तिथि:*	

Company's Seal/Stamp:- कंपनी की मुहर / मोहर: -