



ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

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Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division

CE: PR: 003- Rev 02

PB 2606 , Mysore Road Bangalore , 560026 INDIA

SPECIAL COMMERCIAL CONDITIONS OF CONTRACT

Reference is brought to BHEL's Instructions to Bidders (Document Ref: CE: PR: 001- Rev 05) and General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 03).

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. : PVR0000306
RFQ Date : 31-12-2024
RFQ Due Date : 21-01-2025
Customer/Project : ADANI/MEL 2X800MW PH-II & RAIGARH 2X800MW
Scope Description : ELECTRONIC TRANSMITTER [HART]

BHEL-EDN invites you to quote your best competitive prices as per the purchase specification. 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 **21-01-2025** 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:

vinitraj@bhel.in or rk.pandey@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)~~

Destination: For Indigenous scope of supply, items are to be directly despatched to BHEL site office/stores located at respective project sites within India. Detailed Consignee details will be issued by BHEL along with Despatch Clearance.

Imported scope of supply:

- DEEC / SEZ/EPCG/DFIA/ Physical Export contract: Eligible for "NIL" Basic Customs Duty.
- Project Imports: Eligible for Concessional Basic Custom Duty.
- Basic Custom duty and Cess on Basic Custom duty are reimbursable by customer.

Terms of Delivery:

- Indigenous scope of supply:** 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) <i>(strike off, if not applicable)</i>	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 <i>(strike off, if not applicable)</i>	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	AGREE CIF value Yes, benefit passed on to BHEL in the priced quotation. (or) We confirm that there are no	

		<p>be passed on to BHEL and confirmed in the quotation.</p> <p>If there are no imported raw materials/ components, same shall be confirmed in the offer.</p>	imported components	
03	Delivery Period	<p>Within 14 weeks from the date of issue of Manufacturing clearance along with approved document.</p> <p>Tentative Delivery:- MEL2X800MW PH-II: Main Supply U#3: June 2025 U#4: Sep 2025 Mandatory Spares: March 2026 RAIGARH 2X800MW: Main Supply U#2: Dec 2025 U#3: Mar 2026 Mandatory Spares: Jun 2026</p> <p>Delay in contractual delivery will attract Penalty as per GCC Clause no.: 04 b.</p> <p>Delivery period mentioned is only indicative. Please quote the earliest and best possible lead time in BIDDER'S CONFIRMATION column.</p> <p>In case, the delivery period mentioned in the tender is not met; BHEL reserves the right to reject such offers.</p>	<p>AGREE</p> <p>..... weeks</p>	
04	<p>Terms of Payment at the time of material supply</p> <p>Note: MSME vendors' may opt to get payment through Trade Receivables Discounting System (TReDS)</p>	<p>Refer Clause "F" of Instructions to Bidder for BHEL standard Payment terms and loading factors applicable for non-compliance against payment terms:</p> <p>Indigenous Scope: a) Supply with Service(s) b) Supply only</p> <p>Imported Scope: c) Supply with Service(s) d) Supply only</p> <p>High-Sea sales: e) Supply with Service(s) f) Supply only</p> <p>Spares: b) and/or d)/f) depending upon the scope</p>	AGREE	
05	Declaration of local content as the case may be.	<p>'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.</p> <p>(Refer Clause 'A' Sl. No. 12 of Instructions to Bidders).</p> <p>a) Please indicate the cost of locally sourced imported items (inclusive of taxes) along with</p>	<p>Percentage of local content: _____ %</p> <p>Details of the Location(s) at which the local value addition is made: _____</p> <p>a) % of locally</p>	

		<p>break-up on license/royalties paid/technical expertise cost etc. sourced from outside India in priced offer and as % in technical offer.</p> <p>b) For items sold by bidder as reseller, OEM certificate for Country of Origin to be submitted.</p> <p>c) Please confirm submission of local content certificate in line with DPIIT Order – Public Procurement (Preference to Make in India), Order 2017-Revision dtd 19.07.2024.</p>	<p>sourced imported items (inclusive of taxes) along with break-up on license/royalties paid/technical expertise cost etc. sourced from outside India</p> <p>_____</p>	
06	<p>Declaration as a compliance to Rule 144(xi) of GFR, 2017 amendment dt 23.07.2020 & dt 24.02.2023 issued by Ministry of Finance, Govt. of India.</p>	<p>The below declaration is to be submitted on Company Letter head duly signed and sealed by authorised signatory, for ascertaining the eligibility of offer in the tender.</p> <p>“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.”</p> <p>(Refer Clause ‘A’ Sl. No. 13 of Instructions to Bidders).</p> <p>Note: Wherever applicable, evidence of valid registration by the Competent Authority shall be attached.</p> <p>Additional declaration by Bidder in the cases of specified Transfer of Technology (ToT):</p> <p>“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.”</p> <p>OR</p> <p>“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.”</p>		

II. 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:

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

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

4.2 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)

4.3 Performance Security is to be furnished within 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.

4.4 Forfeiture of Performance Security:

The performance security will be forfeited and credited to BHEL's account in the event of a breach of contract (failure) by the supplier. wherever the value of Performance security available with BHEL against the said contract is at least 10% of the contract value, the same shall be encashed. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies be pursued.

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.

4.5 The Performance Security shall not carry any interest.

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.

- (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 shall include but not limited to 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) ~~Item-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:

- i. The Procuring Entity reserves its right to grant preferences to eligible Bidders under various Government Policies/ directives (policies relating to Make in India, MSME etc.)
- ii. Only Class-1 & Class-II local offers are acceptable. Offers with less than 20% local content shall be rejected 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, the *Office Memorandum* issued by Department of Expenditure dt:18.05.2023 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.

- 2) Preference to Make in India products: 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, the *Office Memorandum* issued by Department of Expenditure dt:18.05.2023 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 supplier'.

{'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%.

Operation methodology of Purchase preference clause to MSE & MII bidders is as detailed under clause:4. c. b) in the Office Memorandum issued by Department of Expenditure dt:18.05.2023 (ref. Annexure-VIII of ITB).

Note: In case of negotiations, the margin of purchase preference (20% for Class-I Non-MSE or 15% for MSE) shall be based on pre-negotiated L1 price and the eligible Class-I & MSE local bidder will have to match the negotiated L1 price.

~~(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) Rate Contract specific conditions:

a) This tender is for entering into a Rate Contract for Supply for various projects, which shall remain valid for a period of one year from the date of LOA (Letter of Award) for placement of purchase orders. If required, Rate Contract may be extended based on mutual consent.

b) Quantity indicated in the tender, is based on BHEL's projected requirement over the next one year. Evaluation will be done as an overall package for the total quantity.

However, after entering into the rate contract, individual Firm PO will be placed on the Rate Contracted vendor for the required BOM of specific project requirement, with unit price as per rate contract; as and when requirement arises, limited to total rate contract value during the tenure of this rate contract. For those projects where the rate contracted vendor is not approved by customer, separate procurement action will be initiated.

c) PVC clause not acceptable. Rates and other terms and conditions agreed upon shall remain firm till the completion of tenure of rate contract or until the purchase order is executed / completed in all respects, whichever is later.

d) BHEL-EDN invites you to quote your best prices as per the enclosed technical specifications. The approximate quantity required for the rate contract period based on tentative project-wise quantity. Please furnish your quote as per enclosed tender instructions.

Vendors to furnish:

(i) Documentation for each of the orders placed by BHEL-EDN.

(ii) Test certificates for each of the orders placed by BHEL-EDN as a project specific requirement.

13) 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.

In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/guidelines.

14) 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.

(15) Ordering & Delivery:

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

16) Any additional commercial term or deviation in commercial terms mentioned in other documents shall be ignored and will not be considered for evaluation.

With this, we hereby confirm that all the terms & conditions as indicated in Instructions to Bidders (Document Ref: CE: PR: 001- Rev 05) & 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 can be raised within **7 days** of floating tender. No clarification will be entertained by BHEL after given cut-off date.
- (3) For the purpose of availing GST amount as Input Tax Credit (ITC), time limits are applicable and currently, it is September of the subsequent Financial Year. If complete set of invoice and other supporting billing document required as per PO is not submitted to concerned Purchase Officer at least 45 days prior to this cut-off date, BHEL will not be able to avail Input Tax Credit and hence corresponding GST amount will not be paid to the vendor.

On Bidder Letter Head

Date:

To,

M/s Bharat Heavy Electricals Ltd.

Electronics Division, Mysore Road,

Bangalore – 560026

Sub: Model Clause / Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 19.07.2024

Ref: BHEL Tender / RFQ / NIT Number

I (authorized signatory for M/s) a 'Class-I Local Supplier' / 'Class-II Local Supplier' at the time of tender, bidding or solicitation hereby confirm that the item meets the Local Content requirement for 'Class-I Local Supplier' / 'Class-II Local Supplier' .

Tick appropriate option & cut the other one:

1) We are the reseller/distributor of the quoted product and the Local Content percentage is
Break up of Local value addition to be furnished below (inclusive of Taxes):

- a)
- b)
- c)

OEM certificate for country of origin to be submitted for above.

2) We are not the reseller/distributor of the quoted product and the Local Content percentage is

The address is as below, where the local content / value addition is made:

[Factory Address]

For M/s

Authorized Signatory

(with company seal & Name)

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.

SI	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: Vinit Raj Tripathi
Dept.: CE-MM-PR
Address: BHEL-EDN, Mysuru Road, Bengaluru-560026.
Phone: 080-2699-8188, 9690556249
Email: vinitraj@bhel.in

(2)

Name: Rabindra Kumar Pandey
Dept.: CE-MM-PR
Address: BHEL-EDN, Mysuru Road, Bengaluru-560026.
Phone: 080-2698-9042, 9449853204
Email: rk.pandey@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 _____

ELECTRONIC TRANSMITTER [HART] **FOR** ADANI/MEL 2X800MW PH-II & RAIGARH 2X800MW
PROJECTS

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)/ Contractor (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 Principal 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, ಮಹಾಪ್ರबंधಕರು/ನಿರ್ದ. - ೨೦೨೨-ವಿ.ಆರ್.
 पूजा वी. राव, महाप्रबंधक/सी.ई.-एम.एम.-पी.आर.
POOJA V RAO, MANAGER/CE-MM-PR
 For & On behalf of the Bidder/ Contractor
BHEL-EDN, MYSURU ROAD, BENGALURU-560026
 (Office Seal)

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

Place BENGALURU
 Date _____

Witness: *R. K. Pandey*
 (Name & Address) _____

Witness: _____
 (Name & Address) _____

रवींद्र कुमार पांडेय, महाप्रबंधक/निर್ದ. - २०२२-वि.आर.
 रवींद्र कुमार पांडेय, उप महाप्रबंधक/सी.ई.-एम.एम.-पी.आर.
RABINDRA KUMAR PANDEY, DY. GENERAL MANAGER/CE-MM-PR
BHEL-EDN, MYSURU ROAD, BENGALURU-560026

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ಭಾರತ್ ಹವಿ 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 05

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 05), General Conditions of Contract (document reference: CE: PR: 002 - Rev 03) 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/liason 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/vender_registration/vender.php

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-IX for 'Restrictions under Rule 144(Xi) of General Financial Rules,2017 amendment dt: 23.07.2020'.

B. GUIDELINES FOR PREPARATION OF OFFER:

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 website 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.

In case 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.

F. STANDARD PAYMENT TERMS OF BHEL-EDN:

<u>PURCHASE ORDERS FOR:</u>	<u>SUPPLY WITH SERVICE(S)</u>	<u>SUPPLY ONLY</u>
<u>INDIGENOUS PROCUREMENT</u>	<p>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.</p> <p><u>Note:</u> 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.</p>	<p>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.</p>
<u>IMPORT PROCUREMENT</u>	<p>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.</p> <p><u>Note:</u> 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.</p>	<p>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.</p>

<p><u>HIGH-SEA SALES PROCUREMENT</u></p>	<p>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</p> <p><u>Note:</u> 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.</p>	<p>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.</p>
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g. Erection and Commissioning:

Evaluation methodology: Unless and otherwise specified in SCC, E&C charges should not be less than 05% of the main supply value. In case the quoted total E&C value is less than 05% 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, Commissioning charges should not be less than 05% of the main supply value. In case the quoted total Commissioning charges is less than 05% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price proportionally from all items and apportioning towards Commissioning charges.

Payment term: 100% Commissioning 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 Commissioning.

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:**i) INDIGENOUS PROCUREMENT:**

For payment term with credit period of less than 45 days for indigenous supply, 'Base rate of SBI (as applicable on the date of bid opening; Techno-commercial bid opening in case of two part bids) +6%', shall be considered for loading for the period of relaxation sought.

ii) IMPORT PROCUREMENT:

- 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 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 opting to quote with usance LC payment term of 120 days shall note that LC processing charges viz., opening, amendment/ discrepancy (if & as applicable) will be to supplier's account. 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.

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. Performance security: To ensure due performance of the contract, Performance Bank Guarantee (PBG) or Security Deposit (SD), hereafter referred as performance security has to be submitted by successful bidder for 05% (unless specified otherwise) of the contract value.

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. PBG should be in the format specified in Annexure-VII of ITB and no deviation to this format will be allowed.

(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)

- b) PBG has to be furnished within 14 days (unless specified otherwise) after notification of the award and it should remain valid for a period of 60 days beyond the date of completion of all contractual obligations, including warranty obligations.
- c) The Performance security will be forfeited and credited to BHEL's account in the event of a breach of contract by the supplier.
- d) Performance security shall be refunded to the supplier without interest, after duly performing and completing the contract in all respects but not later than 60 days of completion of all such obligations including the warranty under the contract.
- e) The Performance security shall not carry any interest.

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 Splitable: 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.

Operation methodology of Purchase preference clause to MSE & MII bidders is as detailed in the attached Office Memorandum issued by Department of Expenditure dt:18.05.2023 (Annexure-VIII).

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

Annexure I
Guidelines for Indian Agents

- **Definition of Indian Agent:** An Indian Agent of foreign principal is an individual, a partnership, an association of persons, a private or public company, that carries out 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.

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
D06	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 / transferring 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 Query, 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.

Sl. No.	Name of the bank
1	State Bank of India
2	Canara Bank
3	IDBI Bank Limited
4	ICICI Bank Limited
5	HDFC Bank Limited
6	Axis Bank
7	IndusInd Bank Limited
8	Bank of Baroda
9	Exim Bank
10	Indian Bank
11	Punjab National Bank
12	Union Bank of India
13	Yes Bank Limited
14	RBL Bank Ltd.
15	Standard Chartered Bank
16	Indian Overseas Bank
17	Kotak Mahindra Bank Limited
18	Federal Bank Limited
19	Hongkong and Shanghai Banking Corporation Ltd

Annexure-X

BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To
NAME
& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

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 at.....(name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) with its registered office at _____² hereinafter referred to as the 'Vendor / Contractor / Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No.....dated³ valued at Rs.....⁴ (Rupees -----)/FC.....(in words.....) for⁵ (hereinafter called the 'Contract') and the Vendor / Contractor / Supplier having agreed to provide a Contract Performance Bank Guarantee, equivalent to% (.... Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,

we,, (hereinafter referred to as the Bank), having registered/Head office at and inter alia 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 of Rs -- -----⁶ (Rupees -----) without any demur, immediately on first 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 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 thereunder and the Vendor / Contractor / Supplier shall have no claim against us for making such payment.

We thebank 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/satisfactory completion of the performance guarantee period as per the terms of the 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.

WeBANK 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 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 including.....⁷ and shall be extended from time to time for such period as may be desired by 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 thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the⁵ we shall be discharged from all liabilities under this guarantee thereafter.

We, 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 exceed.....⁶
- b) This Guarantee shall be valid up to⁷
- c) Unless the Bank is served a written claim or demand on or before⁸ 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)

Dated.....

Place of Issue.....

¹ NAME AND ADDRESS OF EMPLOYER i.e Bharat Heavy Electricals Limited

² NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

³ DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

⁴ CONTRACT VALUE

⁵ PROJECT/SUPPLY DETAILS

⁶ BG AMOUNT IN FIGURES AND WORDS

⁷ VALIDITY DATE

⁸ DATE OF EXPIRY OF CLAIM PERIOD

F. No. DPE/3(3)/10-Fin.
Government of India
Ministry of Finance
Department of Public Enterprises

Block No. 14, CGO Complex,
Lodi Road, New Delhi-110003
Dated the 29th May, 2023

To,

Chief Executives of all CPSEs

Subject:- Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 - regarding

Sir/Madam,

The undersigned is directed to forward herewith a copy of Department of Expenditure O.M. dated 18th May, 2023 on the subject mentioned above for information and strict compliance.

Encl : As stated


(Kailash Bhandari)
Deputy Director
Tel : 2436-6247

Copy to :- Shri Kanwalpreet, Director, Department of Expenditure, Room No. 264-C,
North Block, New Delhi.

No.F.1/4/2021-PPD
Government of India
Ministry of Finance
Department of Expenditure
Public Procurement Division

264-C, North Block, New Delhi.
18.05.2023.

OFFICE MEMORANDUM

Subject: Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

The undersigned is directed to refer two Preferential Procurement Orders mandated for the Public Procurement in India, namely:

- i. Public Procurement Policy for Micro and Small Enterprises (MSEs) Order dated 23.03.2012 (PPP-MSE Order) issued by Ministry of Micro, Small and Medium Enterprises (MoMSME) in exercise of the powers conferred in Section 11 of the MSME Development Act, 2006. (Last revised on 09.11.2018)
- ii. Public Procurement (Preference to Make in India) Order, 2017 (PPP-MII order), under Rule 153(iii) of the General Financial Rules (GFRs) 2017, approved by the Cabinet. Implementation of this PPP-MII order is monitored by Department for Promotion of Industry and Internal Trade (DPIIT). (Last revised on 16.09.2020.)

2. It has been brought to the notice of this Department that concurrent application of these two orders are creating confusion to the procuring entities and different procuring entities interpret them differently. In order to bring predictability both to the procuring entities as well as bidders, following guidelines are being issued.

Guidelines

3. The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government tender, may or may not be Class-I local suppliers. Suppliers may be categorised in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class-I local supplier.	"MSE Class-I local supplier"
Supplier is MSE but not Class-I local supplier.	"MSE but non-Class-I local supplier"
Supplier is not MSE but is Class-I local supplier.	"Non-MSE but Class-I local supplier"
Supplier is neither MSE nor Class-I local.	"Non-MSE non-Class-I local supplier"

4. The applicability of PPP-MSE Order and PPP-MII Order in various scenarios, involving simultaneous purchase preference to MSEs and Class-I local suppliers under PPP-MSE Order and PPP-MII Order respectively, shall be as under:

- a) *Items covered under Para 3(a) of PPP- MII Order, 2017 for which Nodal Ministry has notified sufficient local capacity and competition:* For these items, only Class-I local suppliers are eligible to bid irrespective of purchase value. Hence, Class-II local suppliers or Non-local suppliers, including MSEs which are Class-II local suppliers/ Non-local suppliers, are not eligible to bid. Possible scenarios can be as under:
- (i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is given to MSEs as per PPP-MSE Order. Balance quantity is to be awarded to the L-1 bidder.
- b) *Items reserved exclusively for procurement from MSEs as per PPP-MSE Order:* These items are reserved exclusively for purchase from MSEs. Hence, non-MSEs are not eligible to bid for these items. Possible scenarios can be as under:
- (i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is "MSE non-Class-I local supplier" - Purchase preference is to be given to Class-I local supplier as per PPP-MII Order. Balance quantity, is to be awarded to L-1 bidder.
- c) *If items are neither notified for sufficient local capacity nor reserved for MSEs, then the process will be as follows:*
- c (a) Items covered under Para 3A(b) of PPP-MII Order are divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:
- (i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.
 - (ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is to be given to MSEs, if eligible, as per PPP-MSE Order. Balance quantity is to be awarded to L-1 bidder.
 - (iii) L-1 is "MSE but non-Class-I local supplier" - Purchase preference is to be given to Class-I local suppliers, if eligible, as per PPP-MII Order. Balance quantity is to be awarded to L-1 bidder.
 - (iv) L-1 is "Non-MSE non-Class-I local supplier" - Purchase preference is to be given to MSEs as per PPP-MSE Order. Thereafter, purchase preference is to be given to Class-I local suppliers for "50% of the tendered quantity minus quantity allotted to MSEs

above” as per PPP- MII Order. For the balance quantity, contract is to be awarded to L-1 bidder. (Kindly refer to the illustrative example in the annexure).

- c (b) Items covered under Para 3A(c) of PPP-MII Order, 2017 are non-divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:
- (i) L-1 is “MSE Class-I local supplier” - Contract is awarded to L-1.
 - (ii) L-1 is not “MSE Class-I local supplier” but the “MSE Class-I local supplier” falls within 15% margin of purchase preference - Purchase preference is to be given to lowest quoting “MSE Class-I local supplier”. If lowest quoting “MSE Class-I local supplier” does not accept the L-1 rates, the next higher “MSE Class-I local supplier” falling within 15% margin of purchase preference is to be given purchase preference and so on.
 - (iii) If conditions mentioned in sub paras (i) and (ii) above are not met i.e. L-1 is neither “MSE Class-I local supplier” nor “MSE Class-I local supplier” is eligible to take benefit of purchase preference, the contract is to be awarded/ purchase preference to be given in different possible scenarios as under:
 - A. L1 is “MSE but non-Class-I local supplier” or “Non-MSE but Class-I local supplier” – Contract is be awarded to L1.
 - B. L1 is “Non-MSE non-Class-I local supplier” - First purchase preference to be given to MSE as per PPP-MSE Order. If MSE not eligible/ does not accept - purchase preference to be given to Class- I Local supplier as per PPP-MII Order. If Class-I Local supplier also not eligible/ does not accept – contract to be awarded to L-1.
- d) *Items reserved for both MSEs and Class-I local suppliers:* These items are reserved exclusively for purchase from MSEs as well as Class-I local suppliers. Hence, only “MSE Class-I local supplier” are eligible to bid for these items. Non-MSEs/Class-II local suppliers/ Non-local suppliers cannot bid for these items. Hence the question of purchase preference does not arise.
- e) Non-local suppliers, including MSEs falling in the category of Non-local suppliers, shall be eligible to bid only against Global Tender Enquiry.


(Kanwalpreet)
Director

Tel.:-223093811; email: - kanwal.irss@gov.in

To

1. Secretaries of all Central Government Ministries/ Departments.
2. Secretary Department of Public Enterprises with a request for issuing suitable instructions to all Central Public Sector Enterprises in this regard.

Example explaining applicability in scenario explained in para 4 c (a)(iv)

(Scenario: Divisible items, both MSEs as well as Class-I local suppliers eligible for purchase preference and L-1 is “Non-MSE non-Class-I local supplier”)

Item – Desktop computer

Qty – 50 Nos.

Details of bids received

Sr. No.	Name of bidder	Rates quoted	Price Ranking	Status of bidder
1.	A	100	L1	“Non-MSE non- Class-I local supplier”
2.	B	110	L2	“Non-MSE but Class-I local supplier”
3.	C	112	L3	“MSE but non- Class-I local supplier”
4.	D	115	L4	“Non-MSE but Class-I local supplier”
5.	E	118	L5	“MSE but non- Class-I local supplier”
6.	F	120	L6	“MSE Class-I local supplier”

1. In this case, first purchase preference is to be given to MSEs as per PPP-MSE Order for 25% of tendered quantity of 50 Nos. i.e. 12.5 Nos. (rounded off to the next whole number say 13 Nos). Accordingly, invite L3 (bidder C), whose quoted rates falls within 15% margin of purchase preference to match L1 price i.e. Rs. 100/- for quantity of 13 Nos. Bidder “E” and “F”, although MSEs, will not get purchase preference since their quoted rates don’t fall within 15% margin of purchase preference. Bidder C will be considered for order of 13 Nos. on confirmation of reduction of price.
2. For 50% of balance quantity of 37 number (tendered quantity of 50 – 13 awarded to bidder C; assuming bidder C has confirmed to accept L1 rates), purchase preference will be given to lowest Class-I local supplier as per PPP-MII Order. Accordingly, bidder B will be invited to match L-1 price for 50% of 37 Nos i.e. 18.5 (say 19 Nos of computers). If bidder “B” does not accept the L1 price i.e. price of Rs. 100/- per unit, next higher Class-I local supplier falling within 20% margin of purchase preference, i.e. bidder “D”, may be invited to match L-1 price for 19 Nos. of computers and so on.
3. For remaining quantity i.e. 18 Nos (50-13-19), the contract will be awarded to lowest quoting bidder i.e. Bidder “A”, who is L-1 in the example.

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 assessee	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	<u>2021-22</u>
(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
Electronics 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 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.



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.

- '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.
- '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.
- '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.
- '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:

- words indicating one gender include all genders;
- 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.

5. Contract variations (Increase or decrease in the scope of supply): 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. Pre-dispatch inspection at Seller premises: Before dispatch, the goods will be inspected by Buyer / Consignee or their Authorized Representative or by Nominated External Inspection Agency (independently or jointly with Buyer or Consignee as decided by the Buyer) at Seller premises (or at designated place for inspection as declared / communicated by the seller) for their compliance to the contract specification. For in-house testing, the Sellers will provide necessary facilities free of cost.

Prior written notice of at least 10 days shall be given along with internal test certificates/COC and applicable test certificates. Buyer will notify the Seller about the Authorized Representative/ Nominated External Inspection Agency and the date for testing. Scope of inspection is limited to 'approved Quality plan or QA Checklist or Purchase specification'. BHEL reserves the right for conducting repeat test, if required. 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.

All costs related to re-inspection(s) 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, fuel, 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. Transit Insurance: 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. Mode of dispatch:
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 Dispatch Clearance from BHEL.
Import 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. Changes in Statutory levies:
 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.

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 or from Bank Guarantee. 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 or invoking the contract Performance Bank Guarantee.

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 the CGST & SGST / IGST or any new or additional taxes or duties imposed within the Contractual Delivery Period or extended Contractual Delivery Period shall be to BHEL's account whereas if it is after Contractual Delivery period, it shall be to supplier's account. Any corresponding decrease on account of above shall be passed on to BHEL.

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.

10. Availing duty/tax exemption benefits by bidder, wherever applicable: 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 Phytosanitary/ 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), wherever the value of Performance security available with BHEL against the said contract is atleast 10% of the contract value, the same shall be encashed.

In case the value of the security instruments available with BHEL is less than 10% of the contract value, the balance amount will be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies shall 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: If at any time during the continuance of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by the reasons of any war, hostility, acts of the public enemy, epidemics, civil commotion, sabotage, fires, floods, explosion, quarantine restrictions, strikes, lockouts or act of God provided notice of happening of such event duly evidenced with documents is given by one party to the other within 10 days from the date of occurrence thereof, neither party shall be by reasons of such event, be entitled to terminate the Contract nor shall either party have any claim for damages against the other in respect of such non-performance or the delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Buyer as to whether the deliveries have been so resumed or not, shall be final and conclusive.

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.



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PURCHASE SPECIFICATIONS FOR ELECTRONIC TRANSMITTERS(HART)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED

Sandeep

ISSUED

416

DATE

30/10/2024



A4-11

CE / ADANI MEL-II ,RAIGARH / 416/ETxr

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3.	Bill of Material	CE / ADANI MEL-II ,RAIGARH / 416/ETxr /BOQ, Rev 00 . Sheets 25
4.	Reference Quality Plan	CE / ADANI MEL-II ,RAIGARH / 416/ETxr QP, Rev 00 Sheets 03

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SCOPE OF SUPPLY FOR ELECTRONIC TRANSMITTERS(HART)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED

Sandeep

ISSUED

416

DATE

30/10/2024



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SCOPE OF SUPPLY

1.0 **Electronic Transmitters** as per technical Requirements Ref: CE / ADANI MEL-II ,RAIGARH / 416/ TR Rev.00 & BOM Ref: CE / ADANI MEL-II ,RAIGARH / 416/ BOM Rev.00 enclosed.

2.0 **Against each service, model type with accuracy is to be specified. Then consolidated summary BOM is to be made.**

Mandatory spares: Minimum 1(one) no. complete set for each model

Quantity of transmitters as follows.

S1 No	Project	Unit area apprx. Qty (in Nos)	Mand. Spares apprx. Qty (in Nos) @5% of main qty	Total apprx. Qty for the project (in Nos)*
1	ADANI MEL-II 2X800MW	944	47	991
2	ADANI RAIGARH 2X800MW	944	47	991
				1982

For each transmitter, accessories like required number of SS blind plug, ½” Nickel plated brass cable gland, mounting bracket with U bolts / U clamp (for 2” NB pipe) to be supplied.

* Above qty specified may undergo changes during detailed Engg.

3.0 GENERAL TERMS & CONDITIONS

2.1 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 for indisputable calculations of lot prices in case of revised quantities later.

2.2 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 in the original offer, shall be applicable.

2.3 Although transmitters 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.

2.4 Offered transmitters shall have at least two(2) years satisfactory operation in at least two power stations having unit rating of 200MW or above.

2.5 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.

2.6 **Note:** Credentials like PO copies, approved datasheets, end user performance certificate/letter etc. shall be submitted along with the technical bid. These documents shall be reviewed and taken up with the customers for vendor approval. Offer acceptance of such vendors is subject to final approval from end user. (not applicable in case of vendors approved by the customer)

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3.0 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.

3.1 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 4.0)

3.2 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.

3.3 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.

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

- a) Instruction/O&M Manual
- b) Bill of Material
- c) Drawings (GA/layout/wiring/interconnection/schematic, etc.)

4.0 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 ELECTRONIC TRANSMITTERS(HART)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED

Sandeep

ISSUED

416

DATE

30/10/2024



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TECHNICAL REQUIREMENTS

REQUIREMENTS FOR ELECTRONIC TRANSMITTERS

- 1.0 Electronic Transmitters for Pressure, Differential Pressure, Flow and Level measurement shall be furnished complete with all accessories to meet the requirements given below.
- 2.0 Pressure Transmitters and Differential Pressure Transmitters are indicated in the BOM schedule. Transmitters shall be DP type for services where units of calibration range is "mmWC" indicated in BOM.
- 3.0 Electronic transmitters shall meet or exceed the following requirements
- 3.1 Type of Transmitter : Microprocessor based, 2 wire Smart type, HART protocol compatible, with LCD indicator.
- 3.2 Output signal : 4-20 mA DC (Analog) along with superimposed digital based on HART protocol
- 3.3 Accuracy : (i) $\pm 0.1\%$ of calibrated range (min) for low pressure ranges up to 1000mmWC
(ii) $\pm 0.065\%$ of calibration span for others
- 3.4 Turn-down ratio : (i) 10:1 for vacuum /low pressure applications (for span up to 1000mmWC)
(ii) 100:1 for other applications
- 3.5 Repeatability : $\pm 0.05\%$ of calibration span or better
- 3.6 Stability : (i) $\pm 0.25\%$ of calibrated span for 1 year for low pressure ranges up to 1000mmWC
(ii) $\pm 0.15\%$ of calibrated span for 5 years for other applications
- 3.7 Response time : 100 msec or better (except for ranges up to 1000mmWC)
- 3.8 Electrical Connection : $\frac{1}{2}$ " NPT double compression Ni plated brass cable gland
- 3.9 Housing : Weather proof, metallic housing with durable corrosion resistant coating/epoxy coating. Protection Class shall be IP65.
- 3.10 Overpressure : 150% of maximum operating pressure.
- 3.11 Process Connection : $\frac{1}{2}$ " NPT (F).
- 3.12 Measuring element : Capsule/Diaphragm (SS or better)
- 3.13 Load Impedance : 600 Ohms minimum.
- 3.14 Span and zero adjustment: Continuous, tamper proof, remote as well as manual adjustability from instrument with zero suppression and elevation facility is required.
- 3.15 Diagnostics & display : Self indicating feature and LCD type display on transmitter.
- 3.16 Power Supply : 24 V dc $\pm 10\%$.

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3.17 Drain and Vent plug : Drain and Vent plug shall be provided With transmitter.

3.18 Tag number and service engraved in stainless steel tag plate.

3.19 Adjustment/calibration/maintenance : Through centralized PC based System being procured by BHEL separately. Additionally, transmitter should be operable through universal hand held HART communicator being procured by BHEL separately.

3.20 In case of failure & return of power supply to the transmitters, no false signals endangering the system shall be issued.

3.21 **Accessories:** Each transmitter shall have SS blind plugs, Mounting bracket, Hi Tensile U clamp (for 2" NB pipe) and fasteners etc shall be suitable for mounting in LIE/LIR vertical impulse pipe mounting from Up/down ward.

Notes:

1. LVDT type transmitter is not technically acceptable.
2. Transmitters shall be DP type for services where units of calibration range is "mmWC" indicated in BOM.

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BILL OF MATERIAL FOR ELECTRONIC TRANSMITTERS(HART)

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED

Sandeep

ISSUED

416

DATE

30/10/2024

BOM OF ELECTRONIC TRANSMITTERS FOR ADANI MEL PH#2 2X800MW PROJECT

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
1	00LCR23CP011			BLR FILL PUMPs DISCH HDR PRESS	PT	DM WTR	15	KG/CM2	0-25	KG/CM2		1	0	0
2	00LCR23CP012			BLR FILL PUMPs DISCH HDR PRESS	PT	DM WTR	15	KG/CM2	0-25	KG/CM2		1	0	0
3	00LCR70CP011			DM M/U PUMPs DISCH HDR PRESS	PT	DM WTR	7	KG/CM2	0-10	KG/CM2		1	0	0
4	00LCR70CP012			DM M/U PUMPs DISCH HDR PRESS	PT	DM WTR	7	KG/CM2	0-10	KG/CM2		1	0	0
5		30LCR72CF011	40LCR72CF011	NORMAL MAKE UP FLOW TO CONDENSER	FT-DP	DM WTR	7	KG/CM2	0-100	T/HR	DP=0-4500 mmWC	0	1	1
6		30LCR72CF012	40LCR72CF012	NORMAL MAKE UP FLOW TO CONDENSER	FT-DP	DM WTR	7	KG/CM2	0-100	T/HR	DP=0-4500 mmWC	0	1	1
7		30LBQ61CF011	40LBQ61CF011	EXT STM FLOW TO DEA	FT-DP	STEAM	12.83	KG/CM2	0-150	T/HR	DP=0-5000 mmWC	0	1	1
8		30LBQ61CF012	40LBQ61CF012	EXT STM FLOW TO DEA	FT-DP	STEAM	12.83	KG/CM2	0-150	T/HR	DP=0-5000 mmWC	0	1	1
9		30LAB10CF011	40LAB10CF011	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
10		30LAB10CF012	40LAB10CF012	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
11		30LAB10CF013	40LAB10CF013	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
12		30LAB20CF011	40LAB20CF011	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
13		30LAB20CF012	40LAB20CF012	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
14		30LAB20CF013	40LAB20CF013	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
15		30LAB30CF011	40LAB30CF011	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
16		30LAB30CF012	40LAB30CF012	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
17		30LAB30CF013	40LAB30CF013	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
18		30LAB60CF011	40LAB60CF011	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
19		30LAB60CF012	40LAB60CF012	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
20		30LAB60CF013	40LAB60CF013	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
21		30LBG10CF011	40LBG10CF011	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
22		30LBG10CF012	40LBG10CF012	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
23		30LBG10CF013	40LBG10CF013	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
24		30LBG20CF011	40LBG20CF011	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
25		30LBG20CF012	40LBG20CF012	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
26		30LBG20CF013	40LBG20CF013	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
27		30LCA01CF011	40LCA01CF011	CEP-A DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
28		30LCA01CF012	40LCA01CF012	CEP-A DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
29		30LCA02CF011	40LCA02CF011	CEP-B DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
30		30LCA02CF012	40LCA02CF012	CEP-B DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
31		30LCA03CF011	40LCA03CF011	CEP-C DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
32		30LCA03CF012	40LCA03CF012	CEP-C DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
33		30LCA20CF011	40LCA20CF011	COND FLOW AFT GSC	FT-DP	COND	32.01	KG/CM2	0-2200	T/HR	DP=0-9000 mmWC	0	1	1
34		30LCA20CF012	40LCA20CF012	COND FLOW AFT GSC	FT-DP	COND	32.01	KG/CM2	0-2200	T/HR	DP=0-9000 mmWC	0	1	1
35		30LCA90CF011	40LCA90CF011	COND FLOW TO DEA	FT-DP	COND	32.01	KG/CM2	0-2000	T/HR	DP=0-5000 mmWC	0	1	1
36		30LCA90CF012	40LCA90CF012	COND FLOW TO DEA	FT-DP	COND	32.01	KG/CM2	0-2000	T/HR	DP=0-5000 mmWC	0	1	1
37		30PCB50CF011	40PCB50CF011	ACW FLOW AFT SCS	FT-DP	ACW	5.5	KG/CM2	0-5200	M3/HR	DP=0-5000 mmWC	0	1	1
38		30LBQ63CF011	40LBQ63CF011	EXT STM FLOW TO BFPT-A	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
39		30LBQ63CF012	40LBQ63CF012	EXT STM FLOW TO BFPT-A	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
40		30LBQ64CF011	40LBQ64CF011	EXT STM FLOW TO BFPT-B	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
41		30LBQ64CF012	40LBQ64CF012	EXT STM FLOW TO BFPT-B	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
42		30LCH10CF011	40LCH10CF011	HPH-7A DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
43		30LCH10CF012	40LCH10CF012	HPH-7A DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
44		30LCH20CF011	40LCH20CF011	HPH-7B DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
45		30LCH20CF012	40LCH20CF012	HPH-7B DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
46		30LBF10CF011	40LBF10CF011	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
47		30LBF10CF012	40LBF10CF012	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
48		30LBF10CF013	40LBF10CF013	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
49		30LBF20CF011	40LBF20CF011	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
50		30LBF20CF012	40LBF20CF012	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
51		30LBF20CF013	40LBF20CF013	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
52		30PGC21CF011	40PGC21CF011	DMCW PHE O/L HDR FLOW TO TURB & GEN CLRS	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-5000 mmWC	0	1	1
53		30PGC22CF011	40PGC22CF011	DMCW PHE O/L HDR FLOW TO BFP,CEP THRUST BRG & DRIP PMP CLRS	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-4000 mmWC	0	1	1
54		30PGC23CF011	40PGC23CF011	DMCW PHE O/L HDR FLOW TO BLR & STN AUX	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-5000 mmWC	0	1	1
55		30HAC10CF001	40HAC10CF001	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
56		30HAC10CF002	40HAC10CF002	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
57		30HAC10CF003	40HAC10CF003	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
58		30LAE21CF001	40LAE21CF001	RH/DSH SIDE-A SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
59		30LAE21CF002	40LAE21CF002	RH/DSH SIDE-A SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
60		30LAE22CF001	40LAE22CF001	RH/DSH SIDE-B SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
61		30LAE22CF002	40LAE22CF002	RH/DSH SIDE-B SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
62		30LAE71CF001	40LAE71CF001	SH DSH-1 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
63		30LAE71CF002	40LAE71CF002	SH DSH-1 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
64		30LAE72CF001	40LAE72CF001	SH DSH-1 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
65		30LAE72CF002	40LAE72CF002	SH DSH-1 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
66		30LAE91CF001	40LAE91CF001	SH DSH-2 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
67		30LAE91CF002	40LAE91CF002	SH DSH-2 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
68		30LAE92CF001	40LAE92CF001	SH DSH-2 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
69		30LAE92CF002	40LAE92CF002	SH DSH-2 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
70		30HHL10CF001	40HHL10CF001	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
71		30HHL10CF002	40HHL10CF002	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
72		30HHL10CF003	40HHL10CF003	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
73		30HHL15CF001	40HHL15CF001	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
74		30HHL15CF002	40HHL15CF002	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
75		30HHL15CF003	40HHL15CF003	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
76		30LCL30CF001	40LCL30CF001	CONDENSATE PUMP-A DISCH FLOW	FT-DP	COND	2.5	KG/CM2	0-637	M3/HR	DP = 0 - 3000 mmWC	0	1	1
77		30LCL30CF002	40LCL30CF002	CONDENSATE PUMP-B DISCH FLOW	FT-DP	COND	2.5	KG/CM2	0-637	M3/HR	DP = 0 - 3000 mmWC	0	1	1
78		30HFE71CF001	40HFE71CF001	MIXED AIR BEFORE MILL: A FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
79		30HFE71CF002	40HFE71CF002	MIXED AIR BEFORE MILL: A FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
80		30HFE72CF001	40HFE72CF001	MIXED AIR BEFORE MILL: B FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
81		30HFE72CF002	40HFE72CF002	MIXED AIR BEFORE MILL: B FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
82		30HFE73CF001	40HFE73CF001	MIXED AIR BEFORE MILL: C FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
83		30HFE73CF002	40HFE73CF002	MIXED AIR BEFORE MILL: C FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
84		30HFE74CF001	40HFE74CF001	MIXED AIR BEFORE MILL: D FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
85		30HFE74CF002	40HFE74CF002	MIXED AIR BEFORE MILL: D FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
86		30HFE75CF001	40HFE75CF001	MIXED AIR BEFORE MILL: E FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
87		30HFE75CF002	40HFE75CF002	MIXED AIR BEFORE MILL: E FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
88		30HFE76CF001	40HFE76CF001	MIXED AIR BEFORE MILL: F FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
89		30HFE76CF002	40HFE76CF002	MIXED AIR BEFORE MILL: F FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
90		30HFE77CF001	40HFE77CF001	MIXED AIR BEFORE MILL: G FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
91		30HFE77CF002	40HFE77CF002	MIXED AIR BEFORE MILL: G FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
92		30HFE78CF001	40HFE78CF001	MIXED AIR BEFORE MILL: H FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
93		30HFE78CF002	40HFE78CF002	MIXED AIR BEFORE MILL: H FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
94		30LAA01CL011	40LAA01CL011	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
95		30LAA01CL012	40LAA01CL012	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
96		30LAA02CL011	40LAA02CL011	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
97		30LAD11CL011	40LAD11CL011	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
98		30LAD11CL012	40LAD11CL012	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
99		30LAD12CL013	40LAD12CL013	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
100		30LAD21CL011	40LAD21CL011	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
101		30LAD21CL012	40LAD21CL012	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
102		30LAD22CL013	40LAD22CL013	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
103		30LAD31CL011	40LAD31CL011	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
104		30LAD31CL012	40LAD31CL012	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
105		30LAD32CL013	40LAD32CL013	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
106		30LAD41CL011	40LAD41CL011	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
107		30LAD41CL012	40LAD41CL012	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
108		30LAD42CL013	40LAD42CL013	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
109		30LAD51CL011	40LAD51CL011	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
110		30LAD51CL012	40LAD51CL012	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
111		30LAD52CL013	40LAD52CL013	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
112		30LAD61CL011	40LAD61CL011	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
113		30LAD61CL012	40LAD61CL012	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
114		30LAD62CL013	40LAD62CL013	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
115		30PGB01CL011	40PGB01CL011	DMCW O/H TANK LVL	LT-DP	DMCW	9.5	KG/CM2	0-1645	mm		0	1	1
116		30PGB01CL012	40PGB01CL012	DMCW O/H TANK LVL	LT-DP	DMCW	9.5	KG/CM2	0-1645	mm		0	1	1
117		30HAD81CL001	40HAD81CL001	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
118		30HAD81CL002	40HAD81CL002	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
119		30HAD81CL003	40HAD81CL003	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
120		30HAD82CL001	40HAD82CL001	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
121		30HAD82CL002	40HAD82CL002	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
122		30HAD82CL003	40HAD82CL003	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
123		30HAG11CL001	40HAG11CL001	SEPERATOR STORAGE TANK 'A' DOWNCOMER LEVEL	LT-DP	WATER	300	KG/CM2	0 - 0.5	KG/CM2		0	1	1
124		30HAG12CL001	40HAG12CL001	SEPERATOR STORAGE TANK 'B' DOWNCOMER LEVEL	LT-DP	WATER	300	KG/CM2	0 - 0.5	KG/CM2		0	1	1
125		30QH20CL001	40QH20CL001	ECW TANK LVL	LT-DP	DMCW	6	KG/CM2	0-3000	mmWC		0	1	1
126		30LCL20CL001	40LCL20CL001	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
127		30LCL20CL002	40LCL20CL002	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
128		30LCL20CL003	40LCL20CL003	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
129		30LAB40CP011	40LAB40CP011	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
130		30LAB40CP012	40LAB40CP012	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
131		30LAB40CP013	40LAB40CP013	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
132		30PAB10CP012	40PAB10CP012	DP ACROSS COND-1-L	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
133		30PAB10CP021	40PAB10CP021	DP ACROSS COND-2-L	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
134		30PAB20CP012	40PAB20CP012	DP ACROSS COND-1-R	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
135		30PAB20CP021	40PAB20CP021	DP ACROSS COND-2-R	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
136		30PCB51CP011	40PCB51CP011	ACW DP ACRS PHE-A FOR SG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
137		30PCB52CP011	40PCB52CP011	ACW DP ACROSS PHE-B FOR SG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
138		30PCB53CP011	40PCB53CP011	ACW DP ACROSS PHE-C FOR TG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
139		30PCB41CP011	40PCB41CP011	ACW DP ACROSS VAC PUMP-1 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
140		30PCB42CP011	40PCB42CP011	ACW DP ACROSS VAC PUMP-2 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
141		30PCB43CP011	40PCB43CP011	ACW DP ACROSS VAC PUMP-3 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
142		30PCB44CP011	40PCB44CP011	ACW DP ACROSS VAC PUMP-4 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
143		30PGC11CP011	40PGC11CP011	DMCW DP ACROSS PHE-A(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
144		30PGC12CP011	40PGC12CP011	DMCW DP ACROSS PHE-B(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
145		30PGC13CP011	40PGC13CP011	DMCW DP ACROSS PHE-C(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
146		30PGC14CP011	40PGC14CP011	DP ACRS RECIR CV DMCW-25	DPT	DMCW	9.5	KG/CM2	0-1.5	KG/CM2		0	1	1
147		30PGC14CP012	40PGC14CP012	DP ACRS RECIR CV DMCW-25	DPT	DMCW	9.5	KG/CM2	0-1.5	KG/CM2		0	1	1
148		30HAG15CP002	40HAG15CP002	DIFF. PRESSURE ACROSS STARTUP SYSTEM MIXING PIECE	DPT	WATER	333.4	KG/CM2	0-1	KG/CM2		0	1	1
149		30HAG25CP001	40HAG25CP001	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
150		30HAG25CP002	40HAG25CP002	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
151		30HAG25CP003	40HAG25CP003	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
152		30HLB10CP002	40HLB10CP002	FD FAN-A DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	SEC. AIR	-12	mmWC	0 to 600	mmWC		0	1	1
153		30HLB15CP002	40HLB15CP002	FD FAN-B DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	SEC. AIR	-12	mmWC	0 to 600	mmWC		0	1	1
154		30HLA20CP005	40HLA20CP005	DIFF PRESSURE ACROSS SEC AIR LINE APH- A	DPT	SEC. AIR	261 / 176	mmWC	0 to 200	mmWC		0	1	1
155		30HLA25CP005	40HLA25CP005	DIFF PRESSURE ACROSS SEC AIR LINE APH- B	DPT	SEC. AIR	261 / 176	mmWC	0 to 200	mmWC		0	1	1
156		30HFE10CP002	40HFE10CP002	PA FAN-A DP ACROSS SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	PY. AIR	-13	mmWC	0 to 600	mmWC		0	1	1
157		30HFE15CP002	40HFE15CP002	PA FAN-B DP ACROSS SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	PY. AIR	-13	mmWC	0 to 600	mmWC		0	1	1
158		30HFE30CP003	40HFE30CP003	DIFF PRESSURE ACROSS PRIMARY AIR LINE APH- A	DPT	PY. AIR	1055 / 1027	mmWC	0 to 100	mmWC		0	1	1
159		30HFE35CP003	40HFE35CP003	DIFF PRESSURE ACROSS PRIMARY AIR LINE APH- B	DPT	PY. AIR	1055 / 1027	mmWC	0 to 100	mmWC		0	1	1
160		30HHQ10CP001	40HHQ10CP001	DP ACROSS SCANNER AIR FILTER	DPT	SCA. AIR	287	mmWC	0 to 25	mmWC		0	1	1
161		30HBK10CP007	40HBK10CP007	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 to 1300	mmWC		0	1	1
162		30HBK15CP005	40HBK15CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0-1600	mmWC		0	1	1
163		30HBK15CP006	40HBK15CP006	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0-1600	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
164		30HNA27CP002	40HNA27CP002	AIR HEATER-A FLUE GAS LINE DIFF. PRESSURE	DPT	FLUE GAS	-234 / -333	mmWC	0 to 250	mmWC		0	1	1
165		30HNA28CP002	40HNA28CP002	AIR HEATER- B FLUE GAS LINE DIFF. PRESSURE	DPT	FLUE GAS	-234 / -333	mmWC	0 to 250	mmWC		0	1	1
166		30HNC10CP002	40HNC10CP002	ID FAN-A DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	FLUE GAS	-437	mmWC	0 to 600	mmWC		0	1	1
167		30HNC15CP002	40HNC15CP002	ID FAN-B DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	FLUE GAS	-437	mmWC	0 to 600	mmWC		0	1	1
168		30HJF50CP002	40HJF50CP002	DIFF. PRESSURE ACROSS OP. FLOOR STRAINER	DPT	LDO	20	KG/CM2	0-1	KG/CM2		0	1	1
169		30HJF73CP001	40HJF73CP001	DIFF. PRESSURE ACROSS STRAINER AT DRAIN OIL PUMP INLET	DPT	LDO	0	KG/CM2	0-1	KG/CM2		0	1	1
170		30HFW01CP001	40HFW01CP001	DYNAVANE FILTER-1 DIFFERENTIAL PRESSURE	DPT	SEAL AIR	1055 / 899	mmWC	(-)50 to 50	mmWC		0	1	1
171		30HFW02CP001	40HFW02CP001	DYNAVANE FILTER-2 DIFFERENTIAL PRESSURE	DPT	SEAL AIR	1055 / 899	mmWC	(-)50 to 50	mmWC		0	1	1
172		30QFB10CP101	40QFB10CP101	INSTRUMENT AIR HEADER PRESSURE	PT	AIR	7	KG/CM2	0-10	KG/CM2		0	1	1
173		30LAA01CP011	40LAA01CP011	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
174		30LAA01CP012	40LAA01CP012	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
175		30LAA01CP013	40LAA01CP013	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
176		30LBQ10CP011	40LBQ10CP011	CRH PEG STM PRESS BEF CV	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1
177		30LBQ71CP011	40LBQ71CP011	EXT STM PRESS AT HPH-7A DESH I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
178		30LBQ72CP011	40LBQ72CP011	EXT STM PRESS AT HPH-7B DESH I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
179		30LBQ73CP021	40LBQ73CP021	EXT STM PRESS AT HPH-7A I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
180		30LBQ73CP022	40LBQ73CP022	EXT STM PRESS AT HPH-7A I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
181		30LBQ74CP021	40LBQ74CP021	EXT STM PRESS AT HPH-7B I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
182		30LBQ74CP022	40LBQ74CP022	EXT STM PRESS AT HPH-7B I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
183		30LBQ81CP019	40LBQ81CP019	EXT STM PRESS AT HPH-8A I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
184		30LBQ81CP020	40LBQ81CP020	EXT STM PRESS AT HPH-8A I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
185		30LBQ82CP017	40LBQ82CP017	EXT STM PRESS. AT HPH-8B I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
186		30LBQ82CP018	40LBQ82CP018	EXT STM PRESS. AT HPH-8B I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
187		30LBQ91CP015	40LBQ91CP015	EXT STM PRESS AT HPH-9A I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
188		30LBQ91CP016	40LBQ91CP016	EXT STM PRESS AT HPH-9A I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
189		30LBQ92CP013	40LBQ92CP013	EXT STM PRESS AT HPH-9B I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
190		30LBQ92CP014	40LBQ92CP014	EXT STM PRESS AT HPH-9B I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
191		30LBS31CP011	40LBS31CP011	EXT STM PRESS AT LPH-3 I/L	PT	STEAM	1.52	KG/CM2	(-)1-3	KG/CM2		0	1	1
192		30LBS41CP011	40LBS41CP011	EXT STM PRESS AT LPH-4 I/L	PT	STEAM	3.15	KG/CM2	(-)1-5	KG/CM2		0	1	1
193		30LBS51CP011	40LBS51CP011	EXT STM PRESS AT LPH-5 I/L	PT	STEAM	6.06	KG/CM2	0-10	KG/CM2		0	1	1
194		30LBQ61CP011	40LBQ61CP011	EXT STM PRESS. TO DEA	PT	STEAM	12.83	KG/CM2	0-20	KG/CM2		0	1	1
195		30LBQ61CP012	40LBQ61CP012	EXT STM PRESS. TO DEA	PT	STEAM	12.83	KG/CM2	0-20	KG/CM2		0	1	1
196		30LCC10CP001	40LCC10CP001	LP HEATER-1 SHELL PRESS	PT	STEAM	0.238	KG/CM2	-760mm to 1mm	mm		0	1	1
197		30LCC02CP001	40LCC02CP001	LP HEATER-2 SHELL PRESS	PT	STEAM	0.52	KG/CM2	-760mm to 1mm	mm		0	1	1
198		30LAB10CP011	40LAB10CP011	TDBFP-A BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
199		30LAB20CP011	40LAB20CP011	TDBFP-B BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
200		30LAB30CP011	40LAB30CP011	MDBFP-C BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
201		30LAB40CP016	40LAB40CP016	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
202		30LAB40CP015	40LAB40CP015	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
203		30LAB40CP014	40LAB40CP014	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
204		30LAB41CP011	40LAB41CP011	FW PRESS AT HPH-7A I/L	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
205		30LAB42CP011	40LAB42CP011	FW PRESS AFT HPH-7A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
206		30LAB43CP011	40LAB43CP011	FW PRESS AFT HPH-8A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
207		30LAB44CP011	40LAB44CP011	FW PRESS AFT HPH-9A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
208		30LAB46CP011	40LAB46CP011	FW PRESS AT HPH-7B I/L	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
209		30LAB47CP011	40LAB47CP011	FW PRESS AFT HPH-7B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
210		30LAB48CP011	40LAB48CP011	FW PRESS AFT HPH-8B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
211		30LAB49CP011	40LAB49CP011	FW PRESS AFT HPH-9B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
212		30LAB60CP011	40LAB60CP011	FW PRESS TO ECO	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
213		30LAB24CP101	40LAB24CP101	BFP INT STG TO RH SPRY PRESS	PT	FW	120	KG/CM2	0-250	KG/CM2		0	1	1
214		30LAF20CP011	40LAF20CP011	APRDS SPRAY WTR PRESS AFT CDV-262	PT	COND	32.01	KG/CM2	0-60	KG/CM2		0	1	1
215		30LBG10CP011	40LBG10CP011	MAIN STM PRESS TO APRDS	PT	STEAM	270	KG/CM2	0-400	KG/CM2		0	1	1
216		30LBG10CP012	40LBG10CP012	MAIN STM PRESS TO APRDS	PT	STEAM	270	KG/CM2	0-400	KG/CM2		0	1	1
217		30LBG20CP011	40LBG20CP011	CRH STM PRESS TO APRDS	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
218		30LBG20CP012	40LBG20CP012	CRH STM PRESS TO APRDS	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
219		30LBG30CP011	40LBG30CP011	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
220		30LBG30CP012	40LBG30CP012	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
221		30LBG30CP013	40LBG30CP013	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
222		30LCA20CP011	40LCA20CP011	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
223		30LCA20CP012	40LCA20CP012	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
224		30LCA20CP013	40LCA20CP013	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
225		30LCA33CP011	40LCA33CP011	GLAND SEAL WATER HDR PR.	PT	COND	3	KG/CM2	0-6	KG/CM2		0	1	1
226		30LCA33CP012	40LCA33CP012	GLAND SEAL WATER HDR PR.	PT	COND	3	KG/CM2	0-6	KG/CM2		0	1	1
227		30LCA61CP011	40LCA61CP011	LPH-1 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
228		30LCA62CP011	40LCA62CP011	LPH-2 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
229		30LCA82CP011	40LCA82CP011	LPH-3 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
230		30LCA90CP012	40LCA90CP012	DEA I/L COND PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
231		30LCA90CP023	40LCA90CP023	DEA I/L COND PRESS (BEF FE)	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
232		30LCA91CP024	40LCA91CP024	LPH-4 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
233		30LCJ30CP101	40LCJ30CP101	DRIP PMP DISCH HDR PRESS	PT	COND	23.9	KG/CM2	0-50	KG/CM2		0	1	1
234		30PAB10CP011	40PAB10CP011	CW PRESS AT COND-1 I/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
235		30PAB10CP013	40PAB10CP013	CW PRESS AT COND-1 O/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
236		30PAB10CP022	40PAB10CP022	CW PRESS AT COND-2 O/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
237		30PAB20CP011	40PAB20CP011	CW PRESS AT COND-1 I/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
238		30PAB20CP013	40PAB20CP013	CW PRESS AT COND-1 O/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
239		30PAB20CP022	40PAB20CP022	CW PRESS AT COND-2 O/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
240		30LBQ62CP001	40LBQ62CP001	CRH STM TO BFPT A/B PRESS	PT	STEAM	12	KG/CM2	0-25	KG/CM2		0	1	1
241		30LBQ62CP002	40LBQ62CP002	CRH STM TO BFPT A/B PRESS	PT	STEAM	12	KG/CM2	0-25	KG/CM2		0	1	1
242		30LBG60CP012	40LBG60CP012	AUX STM HDR TO BFP TURBINE PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
243		30LBF10CP011	40LBF10CP011	MS PRESS BEF HPBP-1	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
244		30LBF11CP011	40LBF11CP011	HPBP-1 D/S PRESS	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1
245		30LBF21CP011	40LBF21CP011	HPBP-2 D/S PRESS	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
246		30LBA11CP001	40LBA11CP001	MS PRESS AT SH O/L-LEFT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
247		30LBA11CP002	40LBA11CP002	MS PRESS AT SH O/L-LEFT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
248		30LBA12CP006	40LBA12CP006	MS PRESS AT SH O/L-RIGHT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
249		30LBA12CP007	40LBA12CP007	MS PRESS AT SH O/L-RIGHT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
250		30LBA10CP011	40LBA10CP011	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
251		30LBA10CP012	40LBA10CP012	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
252		30LBA10CP013	40LBA10CP013	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
253		30LBA10CP014	40LBA10CP014	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
254		30LBA10CP015	40LBA10CP015	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
255		30LBA10CP016	40LBA10CP016	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
256		30LBB11CP011	40LBB11CP011	HRH STM PRESS AT RH O/L - LEFT	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
257		30LBB12CP011	40LBB12CP011	HRH STM PRESS. AT RH O/L - RIGHT	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
258		30LBB21CP011	40LBB21CP011	HRH EQUALISING LINE PRESS	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
259		30LBC01CP011	40LBC01CP011	CRH STM PRESS AT RH I/L-LEFT	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
260		30LBC02CP011	40LBC02CP011	CRH STM PRESS AT RH I/L-RIGHT	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
261		30LBC10CP011	40LBC10CP011	CRH STM HDR PRESS AFT NRV	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
262		30MAA50CP004	40MAA50CP004	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
263		30MAA50CP005	40MAA50CP005	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
264		30MAA50CP006	40MAA50CP006	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
265		30SDA10CP001	40SDA10CP001	AIR HEATER WTR WASH LINE PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
266		30SGA10CP001	40SGA10CP001	AIR HEATER FIRE FIGHT LINE PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
267		30LBG80CP002	40LBG80CP002	AUX STEAM PRESS FOR MILL INERTING	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
268		30LBG80CP001	40LBG80CP001	AUX STEAM PRESS FOR MILL INERTING	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
269		30PGC00CP011	40PGC00CP011	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
270		30PGC00CP012	40PGC00CP012	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
271		30PGC00CP013	40PGC00CP013	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
272		30PGC10CP011	40PGC10CP011	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
273		30PGC10CP012	40PGC10CP012	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
274		30PGC10CP013	40PGC10CP013	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
275		30PGC20CP011	40PGC20CP011	DMCW PHE O/L DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
276		30PGL40CP011	40PGL40CP011	DMCW SUC HDR PR AT BFP MTR CLR I/L	PT	DMCW	9.5	KG/CM2	0-16	KG/CM2		0	1	1
277		30HAC10CP001	40HAC10CP001	ECO. INLET LINK PRESSURE AFTER FLOW NOZZLE	PT	WATER	332.2	KG/CM2	0-500	KG/CM2		0	1	1
278		30LAE20CP001	40LAE20CP001	RH/DSH SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	200	KG/CM2	0-300	KG/CM2		0	1	1
279		30SGA51CP002	40SGA51CP002	FIRE WTR TO MILL E TO J PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
280		30SGA51CP001	40SGA51CP001	FIRE WTR TO MILL A TO D PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
281		30LAE70CP001	40LAE70CP001	SH DSH-1 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	322.2	KG/CM2	0-400	KG/CM2		0	1	1
282		30LAE90CP001	40LAE90CP001	SH DSH-2 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	332.2	KG/CM2	0-400	KG/CM2		0	1	1
283		30HAH01CP001	40HAH01CP001	WATER SEPERATOR 'A' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
284		30HAH01CP002	40HAH01CP002	WATER SEPERATOR 'A' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
285		30HAH02CP001	40HAH02CP001	WATER SEPERATOR 'B' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
286		30HAH02CP002	40HAH02CP002	WATER SEPERATOR 'B' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
287		30HAH03CP001	40HAH03CP001	WATER SEPERATOR 'C' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
288		30HAH03CP002	40HAH03CP002	WATER SEPERATOR 'C' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
289		30HAH04CP001	40HAH04CP001	WATER SEPERATOR 'D' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
290		30HAH04CP002	40HAH04CP002	WATER SEPERATOR 'D' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
291		30HAD81CP001	40HAD81CP001	WATER SEPERATOR STORAGE TANK 'A' PRESSURE	PT	WATER	300	KG/CM2	0-400	KG/CM2		0	1	1
292		30HAD82CP001	40HAD82CP001	WATER SEPERATOR STORAGE TANK 'B' PRESSURE	PT	WATER	300	KG/CM2	0-400	KG/CM2		0	1	1
293		30HAG15CP001	40HAG15CP001	WATER STORAGE DOWNCOMER PRESSURE	PT	WATER	298.5	KG/CM2	0-400	KG/CM2		0	1	1
294		30HLB10CP001	40HLB10CP001	FD FAN-A SUCTION CHAMBER PRESSURE	PT	SEC. AIR	-12	mmWC	(-60) to 0	mmWC		0	1	1
295		30HLB15CP001	40HLB15CP001	FD FAN-B SUCTION CHAMBER PRESSURE	PT	SEC. AIR	-12	mmWC	(-60) to 0	mmWC		0	1	1
296		30HLB10CP003	40HLB10CP003	FD FAN-A OUTLET PRESSURE AT DIFFUSER	PT	SEC. AIR	287	mmWC	0 to 600	mmWC		0	1	1
297		30HLB15CP003	40HLB15CP003	FD FAN-B OUTLET PRESSURE AT DIFFUSER	PT	SEC. AIR	287	mmWC	0 to 600	mmWC		0	1	1
298		30HLA20CP004	40HLA20CP004	AH-A SEC. AIR INLET PRESSURE	PT	SEC. AIR	261	mmWC	0 to 500	mmWC		0	1	1
299		30HLA25CP004	40HLA25CP004	AH-B SEC. AIR INLET PRESSURE	PT	SEC. AIR	261	mmWC	0 to 500	mmWC		0	1	1
300		30HLA30CP002	40HLA30CP002	AH-A SEC. AIR OUTLET PRESSURE	PT	SEC. AIR	176	mmWC	0 to 400	mmWC		0	1	1
301		30HLA35CP002	40HLA35CP002	AH-B SEC. AIR OUTLET PRESSURE	PT	SEC. AIR	176	mmWC	0 to 400	mmWC		0	1	1
302		30HFE10CP001	40HFE10CP001	PA FAN-A SUCTION CHAMBER PRESSURE	PT	PY. AIR	-13	mmWC	(-60) to 0	mmWC		0	1	1
303		30HFE15CP001	40HFE15CP001	PA FAN-B SUCTION CHAMBER PRESSURE	PT	PY. AIR	-13	mmWC	(-60) to 0	mmWC		0	1	1
304		30HFE10CP003	40HFE10CP003	PA FAN-A OUTLET PRESSURE AT DIFFUSER	PT	PY. AIR	1076	mmWC	0 to 1600	mmWC		0	1	1
305		30HFE15CP003	40HFE15CP003	PA FAN-B OUTLET PRESSURE AT DIFFUSER	PT	PY. AIR	1076	mmWC	0 to 1600	mmWC		0	1	1
306		30HFE30CP001	40HFE30CP001	AH-A PY. AIR INLET PRESSURE	PT	PY. AIR	1055	mmWC	0 to 1600	mmWC		0	1	1
307		30HFE35CP001	40HFE35CP001	AH-B PY. AIR INLET PRESSURE	PT	PY. AIR	1055	mmWC	0 to 1600	mmWC		0	1	1
308		30HFE40CP002	40HFE40CP002	AH-A PY. AIR OUTLET PRESSURE	PT	PY. AIR	1027	mmWC	0 to 1600	mmWC		0	1	1
309		30HFE45CP002	40HFE45CP002	AH-B PY. AIR OUTLET PRESSURE	PT	PY. AIR	1027	mmWC	0 to 1600	mmWC		0	1	1
310		30HHQ20CP001	40HHQ20CP001	SCANNER AIR FAN OUTLET PRESSURE	PT	SCA. AIR	--	mmWC	0 -800	mmWC		0	1	1
311		30HHL20CP001	40HHL20CP001	WIND BOX PRESSURE - LEFT	PT	SEC. AIR	102	mmWC	0 to 200	mmWC		0	1	1
312		30HHL25CP001	40HHL25CP001	WIND BOX PRESSURE - RIGHT	PT	SEC. AIR	102	mmWC	0 to 200	mmWC		0	1	1
313		30HBK10CP001	40HBK10CP001	FURNACE PRESSURE (WIDE RANGE) - LEFT	PT	FLUE GAS	-5	mmWC	(-)1200 to 1200	mmWC		0	1	1
314		30HBK10CP003	40HBK10CP003	FURNACE PRESSURE - LEFT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
315		30HBK10CP004	40HBK10CP004	FURNACE PRESSURE - LEFT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
316		30HBK15CP003	40HBK15CP003	FURNACE PRESSURE - RIGHT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
317		30HBK20CP001	40HBK20CP001	PLATEN SH OUTLET PRESSURE- LEFT	PT	FLUE GAS	-7	mmWC	0 to (-)25	mmWC		0	1	1
318		30HBK25CP001	40HBK25CP001	PLATEN SH OUTLET PRESSURE- RIGHT	PT	FLUE GAS	-7	mmWC	0 to (-)25	mmWC		0	1	1
319		30HBK30CP001	40HBK30CP001	FINISH RH OUTLET PRESSURE- LEFT	PT	FLUE GAS	-9	mmWC	0 to (-)25	mmWC		0	1	1
320		30HBK35CP001	40HBK35CP001	FINISH RH OUTLET PRESSURE- RIGHT	PT	FLUE GAS	-9	mmWC	0 to (-)25	mmWC		0	1	1
321		30HBK40CP001	40HBK40CP001	FINISH SH OUTLET PRESSURE - LEFT	PT	FLUE GAS	-37	mmWC	0 to (-)75	mmWC		0	1	1
322		30HBK45CP001	40HBK45CP001	FINISH SH OUTLET PRESSURE - RIGHT	PT	FLUE GAS	-37	mmWC	0 to (-)75	mmWC		0	1	1
323		30HBK50CP001	40HBK50CP001	LTRH OUTLET (ECONOMISER INLET) PRESSURE - LEFT	PT	FLUE GAS	-54	mmWC	0 to (-)150	mmWC		0	1	1
324		30HBK55CP001	40HBK55CP001	LTRH OUTLET (ECONOMISER INLET) PRESSURE - RIGHT	PT	FLUE GAS	-54	mmWC	0 to (-)150	mmWC		0	1	1
325		30HNA27CP001	40HNA27CP001	AIR HEATER-A FLUE GAS INLET PRESSURE	PT	FLUE GAS	-234	mmWC	0 to (-)500	mmWC		0	1	1
326		30HNA28CP001	40HNA28CP001	AIR HEATER- B FLUE GAS INLET PRESSURE	PT	FLUE GAS	-234	mmWC	0 to (-)500	mmWC		0	1	1
327		30HNA30CP001	40HNA30CP001	AIR HEATER-A FLUE GAS OUTLET PRESSURE	PT	FLUE GAS	-333	mmWC	0 to (-)600	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
328		30HNA35CP001	40HNA35CP001	AIR HEATER- B FLUE GAS OUTLET PRESSURE	PT	FLUE GAS	-333	mmWC	0 to (-)600	mmWC		0	1	1
329		30HNC10CP001	40HNC10CP001	ID FAN-A INLET SUCTION CHAMBER PRESSURE	PT	FLUE GAS	-437	mmWC	0 to (-)800	mmWC		0	1	1
330		30HNC15CP001	40HNC15CP001	ID FAN-B INLET SUCTION CHAMBER PRESSURE	PT	FLUE GAS	-437	mmWC	0 to (-)800	mmWC		0	1	1
331		30HNC10CP003	40HNC10CP003	ID FAN-A OUTLET DIFFUSER PRESSURE	PT	FLUE GAS	251	mmWC	0 to 500	mmWC		0	1	1
332		30HNC15CP003	40HNC15CP003	ID FAN-B OUTLET DIFFUSER PRESSURE	PT	FLUE GAS	251	mmWC	0 to 500	mmWC		0	1	1
333		30LBG70CP001	40LBG70CP001	AUX STEAM TO SCAPH PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
334		30QHX10CP001	40QHX10CP001	DMCW SUPPLY PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
335		30QHX20CP001	40QHX20CP001	CW BSTR PUMPS DISCH PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
336		30QHX11CP001	40QHX11CP001	DMCW RETURN PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
337		30HJF50CP006	40HJF50CP006	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	KG/CM2	0-25	KG/CM2		0	1	1
338		30HJF50CP007	40HJF50CP007	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	KG/CM2	0-25	KG/CM2		0	1	1
339		30HFE71CP001	40HFE71CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
340		30HFE72CP001	40HFE72CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
341		30HFE73CP001	40HFE73CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
342		30HFE74CP001	40HFE74CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
343		30HFE75CP001	40HFE75CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
344		30HFE76CP001	40HFE76CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
345		30HFE77CP001	40HFE77CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
346		30HFE78CP001	40HFE78CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
347		30HFW20CP003	40HFW20CP003	SEAL AIR FAN DISCHARGE PRESSURE	PT	SEAL AIR	1076	mmWC	0-1600	mmWC		0	1	1
348		30QEB10CP101	40QEB10CP101	SERVICE AIR HEADER PRESSURE	PT	AIR	7	KG/CM2	0-10	KG/CM2		0	1	1
349		30QFA10CP001	40QFA10CP001	INSTRUMENT AIR HEADER PRESSURE	PT	COMPRESSED AIR	7	KG/CM2	0-16	KG/CM2		0	1	1
350		30QFB10CP001	40QFB10CP001	SERVICE AIR HEADER PRESSURE	PT	COMPRESSED AIR	7	KG/CM2	0-16	KG/CM2		0	1	1
351		30HHQ20CP002	40HHQ20CP002	SCANNER AIR/FURNACE DIFF. PRESSURE	DPT	SCA. AIR / FLUE GAS	537/ -5	mmWC	0 - 800	mmWC		0	1	1
352		30HHQ20CP003	40HHQ20CP003	SCANNER AIR/FURNACE DIFF. PRESSURE	DPT	SCA. AIR / FLUE GAS	537/ -5	mmWC	0 - 800	mmWC		0	1	1
353		30HBK10CP002	40HBK10CP002	FURNACE TO WINDBOX DIFF. PRESS. - LEFT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
354		30HBK10CP005	40HBK10CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
355		30HBK10CP005	40HBK10CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
356		30HBK15CP001	40HBK15CP001	FURNACE TO WINDBOX DIFF. PRESS. - RIGHT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
357		30HBK15CP002	40HBK15CP002	FURNACE TO WINDBOX DIFF. PRESS. - RIGHT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
358		30HBK15CP004	40HBK15CP004	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
359		30HHL41CF001	40HHL41CF001	L-SOFA CORNER-1 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
360		30HHL44CF002	40HHL44CF002	H-SOFA FRONT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
361		30HHL42CF001	40HHL42CF001	L-SOFA CORNER-2 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
362		30HHL41CF002	40HHL41CF002	H-SOFA LEFT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
363		30HHL43CF001	40HHL43CF001	L-SOFA CORNER-3 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
364		30HHL42CF002	40HHL42CF002	H-SOFA REAR WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
365		30HHL44CF001	40HHL44CF001	L-SOFA CORNER-4 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
366		30HHL43CF002	40HHL43CF002	H-SOFA RIGHT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
367		30HFW20CP001	40HFW20CP001	SEAL AIR FAN DISCHARGE/ CPA HEADER DIFF. PRESSURE	DPT	SEAL AIR / COLD PA	1076 / 1055	mmWC	0 - 400	mmWC		0	1	1
368		30HFW20CP002	40HFW20CP002	SEAL AIR FAN DISCHARGE/ CPA HEADER DIFF. PRESSURE	DPT	SEAL AIR / COLD PA	1076 / 1055	mmWC	0 - 400	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
369		30HFW21CP001	40HFW21CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
370		30HFW21CP002	40HFW21CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
371		30HFW22CP001	40HFW22CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
372		30HFW22CP002	40HFW22CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
373		30HFW23CP001	40HFW23CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
374		30HFW23CP002	40HFW23CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
375		30HFW24CP001	40HFW24CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
376		30HFW24CP002	40HFW24CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
377		30HFW25CP001	40HFW25CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
378		30HFW25CP002	40HFW25CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
379		30HFW26CP001	40HFW26CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
380		30HFW26CP002	40HFW26CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
381		30HFW27CP001	40HFW27CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
382		30HFW27CP002	40HFW27CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
383		30HFW28CP001	40HFW28CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
384		30HFW28CP002	40HFW28CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
385		30HFC01CP001	40HFC01CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
386		30HFC01CP002	40HFC01CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
387		30HFC02CP001	40HFC02CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
388		30HFC02CP002	40HFC02CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
389		30HFC03CP001	40HFC03CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
390		30HFC03CP002	40HFC03CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
391		30HFC04CP001	40HFC04CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
392		30HFC04CP002	40HFC04CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
393		30HFC05CP001	40HFC05CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
394		30HFC05CP002	40HFC05CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
395		30HFC06CP001	40HFC06CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
396		30HFC06CP002	40HFC06CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
397		30HFC07CP001	40HFC07CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
398		30HFC07CP002	40HFC07CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
399		30HFC08CP001	40HFC08CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
400		30HFC08CP002	40HFC08CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
401		30LBA11CP001	40LBA11CP001	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
402		30LBA11CP002	40LBA11CP002	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
403		30LBA11CP003	40LBA11CP003	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
404		30LBA12CP001	40LBA12CP001	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
405		30LBA12CP002	40LBA12CP002	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
406		30LBA12CP003	40LBA12CP003	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
407		30HCB01CP004	40HCB01CP004	SB STEAM PRESSURE BEFORE SBPRV	PT	STEAM	294.6	kg/cm ²	0 - 400	kg/cm ²		0	1	1
408		30HCB01CP001	40HCB01CP001	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
409		30HCB01CP002	40HCB01CP002	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
410		30HCB01CP003	40HCB01CP003	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
411		30HCB01CF001	40HCB01CF001	SB STEAM SUPPLY FLOW	FT-DP	STEAM	40	kg/cm ²	0 - 22	T/HR	DP range = 0 - 24000 mmWC	0	1	1
412		30HCB13CF001	40HCB13CF001	SB RETRACTS STEAM FLOW - RIGHT	FT-DP	STEAM	40	kg/cm ²	0 - 11	T/HR	DP range = 0 - 10000 mmWC	0	1	1
413		30HCB14CF001	40HCB14CF001	WALL BLOWER STEAM FLOW - RIGHT & REAR	FT-DP	STEAM	40	kg/cm ²	0 - 8	T/HR	DP range = 0 - 2500 mmWC	0	1	1
414		30HCB05CP001	40HCB05CP001	AH-A HOT END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
415		30HCB06CP001	40HCB06CP001	AH-A COLD END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
416		30HCB07CP001	40HCB07CP001	AH-B HOT END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
417		30HCB08CP001	40HCB08CP001	AH-B COLD END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
418		30HCB12CF001	40HCB12CF001	WALL BLOWER STEAM FLOW - LEFT & FRONT	FT-DP	STEAM	40	kg/cm ²	0 - 8	T/HR	DP range = 0 - 2500 mmWC	0	1	1
419		30HCB11CF001	40HCB11CF001	SB RETRACTS STEAM FLOW - LEFT	FT-DP	STEAM	40	kg/cm ²	0 - 11	T/HR	DP range = 0 - 10000 mmWC	0	1	1
420		30HJN10CP001	40HJN10CP001	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
421		30HJN10CP002	40HJN10CP002	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
422		30HJN10CP003	40HJN10CP003	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
423		30HJF50CP001	40HJF50CP001	PRESSURE BEFORE OP. FLOOR STRAINER	PT	LDO	20	kg/cm ²	0 - 30	kg/cm ²		0	1	1
424		30HJF50CP003	40HJF50CP003	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
425		30HJF50CP004	40HJF50CP004	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
426		30HJF50CP005	40HJF50CP005	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
427		30HLD01CP101	40HLD01CP101	APH A - Alarm at Air line system to Air Motor PT1	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
428		30HLD01CP102	40HLD01CP102	APH A - Alarm at Air line system to Air Motor PT2	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
429		30HLD02CP101	40HLD02CP101	APH B - Alarm at Air line system to Air Motor PT1	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
430		30HLD02CP102	40HLD02CP102	APH B - Alarm at Air line system to Air Motor PT2	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
431		30HLD01CP104	40HLD01CP104	APH-A - Guide bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
432		30HLD01CP105	40HLD01CP105	APH-A -Support bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
433		30HLD02CP104	40HLD02CP104	APH-B - Guide bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
434		30HLD02CP105	40HLD02CP105	APH-B -Support bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
435		30HNC10CP007	40HNC10CP007	PT for ID Fan A Sealing/Cooling Air Fan	PT	Air	200	mmWC	0-500	mmWC		0	1	1
436		30HNC20CP007	40HNC20CP007	PT for ID Fan B Sealing/Cooling Air Fan	PT	Air	200	mmWC	0-500	mmWC		0	1	1
437		30HNC10CP029	40HNC10CP029	ID Fan A Suction DPT	DPT	Air	200	mmWC	0-600	mmWC		0	1	1
438		30HNC20CP029	40HNC20CP029	ID Fan B Suction DPT	DPT	Air	200	mmWC	0-600	mmWC		0	1	1
439		30HNC10CP001	40HNC10CP001	ID Fan A Suction PT	PT	Air	200	mmWC	-800 TO 0	mmWC		0	1	1
440		30HNC20CP001	40HNC20CP001	ID Fan B Suction PT	PT	Air	200	mmWC	-800 TO 0	mmWC		0	1	1
441		30HNC10CP001	40HNC10CP001	ID Fan A Discharge PT	PT	Air	200	mmWC	0-600	mmWC		0	1	1
442		30HNC20CP001	40HNC20CP001	ID Fan B Discharge PT	PT	Air	200	mmWC	0-600	mmWC		0	1	1
443		30HLB10CP001	40HLB10CP001	FD Fan A Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
444		30HLB20CP001	40HLB20CP001	FD Fan B Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
445		30HLB10CP002	40HLB10CP002	FD Fan A Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
446		30HLB20CP002	40HLB20CP002	FD Fan B Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
447		30HLA10CP401	40HLA10CP401	FD Fan A Suction PT	PT	Air		mmWC	0-600	mmWC		0	1	1
448		30HLA20CP401	40HLA20CP401	FD Fan B Suction PT	PT	Air		mmWC	0-600	mmWC		0	1	1
449		30HFE10CP001	40HFE10CP001	PA Fan A Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#3 KKS_TAG	UNIT#4 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 3 QTY	UNIT # 4 QTY
450		30HFE20CP001	40HFE20CP001	PA Fan B Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
451		30HFE10CP002	40HFE10CP002	PA Fan A Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
452		30HFE20CP002	40HFE20CP002	PA Fan B Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
453		30HFE10CP401	40HFE10CP401	PA Fan A Discharge PT	PT	Air		mmWC	0-1600	mmWC		0	1	1
454		30HFE20CP401	40HFE20CP401	PA Fan B Discharge PT	PT	Air		mmWC	0-1600	mmWC		0	1	1
455		30HNA70CP001	40HNA70CP001	UNIT-1 ID FAN A Outlet gate SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
456		30HNA75CP001	40HNA75CP001	UNIT-1 ID FAN B Outlet gate SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
457		30HFE30CP002	40HFE30CP002	UNIT-1 PA AH INLET Damper APH B SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
458		30HFE35CP002	40HFE35CP002	UNIT-1 PA AH INLET Damper APH A SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
459		30HFE45CP001	40HFE45CP001	UNIT-1 PA AH OutLET Damper APH B SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
460		30HFE40CP001	40HFE40CP001	UNIT-1 PA AH OutLET Damper APH A SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
461		30HLA20CP002	40HLA20CP002	UNIT-1 SCAPH INLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
462		30HLA20CP003	40HLA20CP003	UNIT-1 SCAPH OUTLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
463		30HLA25CP002	40HLA25CP002	UNIT-1 SCAPH INLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
464		30HLA25CP003	40HLA25CP003	UNIT-1 SCAPH OUTLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
465		30HLA20CP001	40HLA20CP001	UNIT-1 SA AH INLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
466		30HLA25CP001	40HLA25CP001	UNIT-1 SA AH INLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
467		30HLA30CP001	40HLA30CP001	UNIT-1 SA AH OUTLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-500	mmWC		0	1	1
468		30HLA35CP001	40HLA35CP001	UNIT-1 SA AH OUTLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-500	mmWC		0	1	1
469		30HNA10CP001	40HNA10CP001	UNIT-1 SCR A BYPASS DAMPER SEAL AIR LINE	PT	Air		mmWC	0-400	mmWC		0	1	1
470		30HNA20CP001	40HNA20CP001	UNIT-1 SCR B BYPASS DAMPER SEAL AIR LINE	PT	Air		mmWC	0-400	mmWC		0	1	1
471		30HNA30CP002	40HNA30CP002	UNIT-1 FLUE HAS AH A OUTLET DAMPER A SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
472		30HNA30CP003	40HNA30CP003	UNIT-1 FLUE HAS AH A OUTLET DAMPER B SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
473		30HNA35CP002	40HNA35CP002	UNIT-1 FLUE HAS AH B OUTLET DAMPER A SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
474		30HNA35CP003	40HNA35CP003	UNIT-1 FLUE HAS AH B OUTLET DAMPER B SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
												4	470	470

BOM OF ELECTRONIC TRANSMITTERS FOR ADANI RAIGARH 2X800MW PROJECT

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
1	00LCR23CP011			BLR FILL PUMPs DISCH HDR PRESS	PT	DM WTR	15	KG/CM2	0-25	KG/CM2		1	0	0
2	00LCR23CP012			BLR FILL PUMPs DISCH HDR PRESS	PT	DM WTR	15	KG/CM2	0-25	KG/CM2		1	0	0
3	00LCR70CP011			DM M/U PUMPs DISCH HDR PRESS	PT	DM WTR	7	KG/CM2	0-10	KG/CM2		1	0	0
4	00LCR70CP012			DM M/U PUMPs DISCH HDR PRESS	PT	DM WTR	7	KG/CM2	0-10	KG/CM2		1	0	0
5		20LCR72CF011	30LCR72CF011	NORMAL MAKE UP FLOW TO CONDENSER	FT-DP	DM WTR	7	KG/CM2	0-100	T/HR	DP=0-4500 mmWC	0	1	1
6		20LCR72CF012	30LCR72CF012	NORMAL MAKE UP FLOW TO CONDENSER	FT-DP	DM WTR	7	KG/CM2	0-100	T/HR	DP=0-4500 mmWC	0	1	1
7		20LBQ61CF011	30LBQ61CF011	EXT STM FLOW TO DEA	FT-DP	STEAM	12.83	KG/CM2	0-150	T/HR	DP=0-5000 mmWC	0	1	1
8		20LBQ61CF012	30LBQ61CF012	EXT STM FLOW TO DEA	FT-DP	STEAM	12.83	KG/CM2	0-150	T/HR	DP=0-5000 mmWC	0	1	1
9		20LAB10CF011	30LAB10CF011	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
10		20LAB10CF012	30LAB10CF012	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
11		20LAB10CF013	30LAB10CF013	TDBFP-A SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
12		20LAB20CF011	30LAB20CF011	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
13		20LAB20CF012	30LAB20CF012	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
14		20LAB20CF013	30LAB20CF013	TDBFP-B SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1500	T/HR	DP=0-2500 mmWC	0	1	1
15		20LAB30CF011	30LAB30CF011	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
16		20LAB30CF012	30LAB30CF012	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
17		20LAB30CF013	30LAB30CF013	MDBFP-C SUCTION FLOW	FT-DP	FW	32.83	KG/CM2	0-1000	T/HR	DP=0-2500 mmWC	0	1	1
18		20LAB60CF011	30LAB60CF011	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
19		20LAB60CF012	30LAB60CF012	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
20		20LAB60CF013	30LAB60CF013	FW FLOW TO ECO	FT-DP	FW	337.22	KG/CM2	0-3000	T/HR	DP=0-7500 mmWC	0	1	1
21		20LBG10CF011	30LBG10CF011	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
22		20LBG10CF012	30LBG10CF012	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
23		20LBG10CF013	30LBG10CF013	MAIN STM FLOW TO APRDS	FT-DP	STEAM	270	KG/CM2	0-250	T/HR	DP=0-130000 mmWC	0	1	1
24		20LBG20CF011	30LBG20CF011	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
25		20LBG20CF012	30LBG20CF012	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
26		20LBG20CF013	30LBG20CF013	CRH STM FLOW TO APRDS	FT-DP	STEAM	65.06	KG/CM2	0-30	T/HR	DP=0-23000 mmWC	0	1	1
27		20LCA01CF011	30LCA01CF011	CEP-A DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
28		20LCA01CF012	30LCA01CF012	CEP-A DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
29		20LCA02CF011	30LCA02CF011	CEP-B DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
30		20LCA02CF012	30LCA02CF012	CEP-B DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
31		20LCA03CF011	30LCA03CF011	CEP-C DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
32		20LCA03CF012	30LCA03CF012	CEP-C DISCH FLOW	FT-DP	COND	32.01	KG/CM2	0-1200	T/HR	DP=0-9000 mmWC	0	1	1
33		20LCA20CF011	30LCA20CF011	COND FLOW AFT GSC	FT-DP	COND	32.01	KG/CM2	0-2200	T/HR	DP=0-9000 mmWC	0	1	1
34		20LCA20CF012	30LCA20CF012	COND FLOW AFT GSC	FT-DP	COND	32.01	KG/CM2	0-2200	T/HR	DP=0-9000 mmWC	0	1	1
35		20LCA90CF011	30LCA90CF011	COND FLOW TO DEA	FT-DP	COND	32.01	KG/CM2	0-2000	T/HR	DP=0-5000 mmWC	0	1	1
36		20LCA90CF012	30LCA90CF012	COND FLOW TO DEA	FT-DP	COND	32.01	KG/CM2	0-2000	T/HR	DP=0-5000 mmWC	0	1	1
37		20PCB50CF011	30PCB50CF011	ACW FLOW AFT SCS	FT-DP	ACW	5.5	KG/CM2	0-5200	M3/HR	DP=0-5000 mmWC	0	1	1
38		20LBQ63CF011	30LBQ63CF011	EXT STM FLOW TO BFPT-A	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
39		20LBQ63CF012	30LBQ63CF012	EXT STM FLOW TO BFPT-A	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
40		20LBQ64CF011	30LBQ64CF011	EXT STM FLOW TO BFPT-B	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
41		20LBQ64CF012	30LBQ64CF012	EXT STM FLOW TO BFPT-B	FT-DP	STEAM	12.8	KG/CM2	0-100	T/HR	DP=0-2500 mmWC	0	1	1
42		20LCH10CF011	30LCH10CF011	HPH-7A DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
43		20LCH10CF012	30LCH10CF012	HPH-7A DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
44		20LCH20CF011	30LCH20CF011	HPH-7B DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
45		20LCH20CF012	30LCH20CF012	HPH-7B DRN FLOW TO DEA	FT-DP	COND	25.99	KG/CM2	0-300	T/HR	DP=0-1500 mmwc	0	1	1
46		20LBF10CF011	30LBF10CF011	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
47		20LBF10CF012	30LBF10CF012	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
48		20LBF10CF013	30LBF10CF013	HPBP-1 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
49		20LBF20CF011	30LBF20CF011	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
50		20LBF20CF012	30LBF20CF012	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
51		20LBF20CF013	30LBF20CF013	HPBP-2 STM FLOW	FT-DP	STEAM	270	KG/CM2	0-850	T/HR	DP=0-175000 mmWC	0	1	1
52		20PGC21CF011	30PGC21CF011	DMCW PHE O/L HDR FLOW TO TURB & GEN CLRS	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-5000 mmWC	0	1	1
53		20PGC22CF011	30PGC22CF011	DMCW PHE O/L HDR FLOW TO BFP,CEP THRUST BRG & DRIP PMP CLRS	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-4000 mmWC	0	1	1
54		20PGC23CF011	30PGC23CF011	DMCW PHE O/L HDR FLOW TO BLR & STN AUX	FT-DP	DMCW	9.5	KG/CM2	0-1900	T/HR	DP=0-5000 mmWC	0	1	1
55		20HAC10CF001	30HAC10CF001	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
56		20HAC10CF002	30HAC10CF002	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
57		20HAC10CF003	30HAC10CF003	ECO. INLET BOILER FEED WATER FLOW	FT-DP	WATER	332.2	KG/CM2	0 - 2500	T/HR	DP = 0 - 5000 mmWC	0	1	1
58		20LAE21CF001	30LAE21CF001	RH/DSH SIDE-A SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
59		20LAE21CF002	30LAE21CF002	RH/DSH SIDE-A SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
60		20LAE22CF001	30LAE22CF001	RH/DSH SIDE-B SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
61		20LAE22CF002	30LAE22CF002	RH/DSH SIDE-B SPRAY WATER FLOW	FT-DP	WATER	62.1	KG/CM2	0 - 80	T/HR	DP = 0 - 15000 mmWC	0	1	1
62		20LAE71CF001	30LAE71CF001	SH DSH-1 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
63		20LAE71CF002	30LAE71CF002	SH DSH-1 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
64		20LAE72CF001	30LAE72CF001	SH DSH-1 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
65		20LAE72CF002	30LAE72CF002	SH DSH-1 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	294.4	KG/CM2	0 - 98	T/HR	DP = 0 - 5000 mmWC	0	1	1
66		20LAE91CF001	30LAE91CF001	SH DSH-2 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
67		20LAE91CF002	30LAE91CF002	SH DSH-2 SIDE-A SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
68		20LAE92CF001	30LAE92CF001	SH DSH-2 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
69		20LAE92CF002	30LAE92CF002	SH DSH-2 SIDE-B SPRAY WATER FLOW	FT-DP	WATER	287.2	KG/CM2	0 - 52.5	T/HR	DP = 0 - 10000 mmWC	0	1	1
70		20HHL10CF001	30HHL10CF001	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
71		20HHL10CF002	30HHL10CF002	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
72		20HHL10CF003	30HHL10CF003	HOT SEC. AIR FLOW - LEFT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
73		20HHL15CF001	30HHL15CF001	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
74		20HHL15CF002	30HHL15CF002	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
75		20HHL15CF003	30HHL15CF003	HOT SEC. AIR FLOW - RIGHT	FT-DP	SEC. AIR	140	mmWC	0 - 1800	T/HR	DP = 0 - 110 mmWC	0	1	1
76		20LCL30CF001	30LCL30CF001	CONDENSATE PUMP-A DISCH FLOW	FT-DP	COND	2.5	KG/CM2	0-637	M3/HR	DP = 0 - 3000 mmWC	0	1	1
77		20LCL30CF002	30LCL30CF002	CONDENSATE PUMP-B DISCH FLOW	FT-DP	COND	2.5	KG/CM2	0-637	M3/HR	DP = 0 - 3000 mmWC	0	1	1
78		20HFE71CF001	30HFE71CF001	MIXED AIR BEFORE MILL: A FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
79		20HFE71CF002	30HFE71CF002	MIXED AIR BEFORE MILL: A FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
80		20HFE72CF001	30HFE72CF001	MIXED AIR BEFORE MILL: B FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
81		20HFE72CF002	30HFE72CF002	MIXED AIR BEFORE MILL: B FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
82		20HFE73CF001	30HFE73CF001	MIXED AIR BEFORE MILL: C FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
83		20HFE73CF002	30HFE73CF002	MIXED AIR BEFORE MILL: C FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
84		20HFE74CF001	30HFE74CF001	MIXED AIR BEFORE MILL: D FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
85		20HFE74CF002	30HFE74CF002	MIXED AIR BEFORE MILL: D FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
86		20HFE75CF001	30HFE75CF001	MIXED AIR BEFORE MILL: E FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
87		20HFE75CF002	30HFE75CF002	MIXED AIR BEFORE MILL: E FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
88		20HFE76CF001	30HFE76CF001	MIXED AIR BEFORE MILL: F FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
89		20HFE76CF002	30HFE76CF002	MIXED AIR BEFORE MILL: F FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
90		20HFE77CF001	30HFE77CF001	MIXED AIR BEFORE MILL: G FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
91		20HFE77CF002	30HFE77CF002	MIXED AIR BEFORE MILL: G FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
92		20HFE78CF001	30HFE78CF001	MIXED AIR BEFORE MILL: H FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
93		20HFE78CF002	30HFE78CF002	MIXED AIR BEFORE MILL: H FLOW	FT-DP	HOT PY. AIR	903	mmWC	0 - 191	T/HR	DP = 0 - 120 mmWC	0	1	1
94		20LAA01CL011	30LAA01CL011	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
95		20LAA01CL012	30LAA01CL012	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
96		20LAA02CL011	30LAA02CL011	DEAERATOR LVL.	LT-DP	COND	12.8	KG/CM2	0-3600	mm		0	1	1
97		20LAD11CL011	30LAD11CL011	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
98		20LAD11CL012	30LAD11CL012	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
99		20LAD12CL013	30LAD12CL013	HPH-7A LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
100		20LAD21CL011	30LAD21CL011	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
101		20LAD21CL012	30LAD21CL012	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
102		20LAD22CL013	30LAD22CL013	HPH-7B LEVEL	LT-DP	COND	24.2	KG/CM2	0-1000	mm		0	1	1
103		20LAD31CL011	30LAD31CL011	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
104		20LAD31CL012	30LAD31CL012	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
105		20LAD32CL013	30LAD32CL013	HPH-8A LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
106		20LAD41CL011	30LAD41CL011	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
107		20LAD41CL012	30LAD41CL012	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
108		20LAD42CL013	30LAD42CL013	HPH-8B LEVEL	LT-DP	COND	59.94	KG/CM2	0-1000	mm		0	1	1
109		20LAD51CL011	30LAD51CL011	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
110		20LAD51CL012	30LAD51CL012	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
111		20LAD52CL013	30LAD52CL013	HPH-9A LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
112		20LAD61CL011	30LAD61CL011	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
113		20LAD61CL012	30LAD61CL012	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
114		20LAD62CL013	30LAD62CL013	HPH-9B LEVEL	LT-DP	COND	86.75	KG/CM2	0-1000	mm		0	1	1
115		20PGB01CL011	30PGB01CL011	DMCW O/H TANK LVL	LT-DP	DMCW	9.5	KG/CM2	0-1645	mm		0	1	1
116		20PGB01CL012	30PGB01CL012	DMCW O/H TANK LVL	LT-DP	DMCW	9.5	KG/CM2	0-1645	mm		0	1	1
117		20HAD81CL001	30HAD81CL001	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
118		20HAD81CL002	30HAD81CL002	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
119		20HAD81CL003	30HAD81CL003	WATER SEPERATOR STORAGE TANK 'A' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
120		20HAD82CL001	30HAD82CL001	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
121		20HAD82CL002	30HAD82CL002	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1
122		20HAD82CL003	30HAD82CL003	WATER SEPERATOR STORAGE TANK 'B' LEVEL	LT-DP	WATER	300	KG/CM2	0 - 15630	mm		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
123		20HAG11CL001	30HAG11CL001	SEPERATOR STORAGE TANK 'A' DOWNCOMER LEVEL	LT-DP	WATER	300	KG/CM2	0 - 0.5	KG/CM2		0	1	1
124		20HAG12CL001	30HAG12CL001	SEPERATOR STORAGE TANK 'B' DOWNCOMER LEVEL	LT-DP	WATER	300	KG/CM2	0 - 0.5	KG/CM2		0	1	1
125		20QH20CL001	30QH20CL001	ECW TANK LVL	LT-DP	DMCW	6	KG/CM2	0-3000	mmWC		0	1	1
126		20LCL20CL001	30LCL20CL001	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
127		20LCL20CL002	30LCL20CL002	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
128		20LCL20CL003	30LCL20CL003	FLASH TANK DRAIN TANK LEVEL	LT-DP	COND	1	KG/CM2	0-3000	mmWC		0	1	1
129		20LAB40CP011	30LAB40CP011	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
130		20LAB40CP012	30LAB40CP012	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
131		20LAB40CP013	30LAB40CP013	DP ACRSS FCS	DPT	FW	337.22	KG/CM2	0-25	KG/CM2		0	1	1
132		20PAB10CP012	30PAB10CP012	DP ACROSS COND-1-L	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
133		20PAB10CP021	30PAB10CP021	DP ACROSS COND-2-L	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
134		20PAB20CP012	30PAB20CP012	DP ACROSS COND-1-R	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
135		20PAB20CP021	30PAB20CP021	DP ACROSS COND-2-R	DPT	CW	3.5	KG/CM2	0-1.0	KG/CM2		0	1	1
136		20PCB51CP011	30PCB51CP011	ACW DP ACRS PHE-A FOR SG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
137		20PCB52CP011	30PCB52CP011	ACW DP ACROSS PHE-B FOR SG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
138		20PCB53CP011	30PCB53CP011	ACW DP ACROSS PHE-C FOR TG AUX	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
139		20PCB41CP011	30PCB41CP011	ACW DP ACROSS VAC PUMP-1 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
140		20PCB42CP011	30PCB42CP011	ACW DP ACROSS VAC PUMP-2 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
141		20PCB43CP011	30PCB43CP011	ACW DP ACROSS VAC PUMP-3 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
142		20PCB44CP011	30PCB44CP011	ACW DP ACROSS VAC PUMP-4 HE	DPT	ACW	5.5	KG/CM2	0-1.5	KG/CM2		0	1	1
143		20PGC11CP011	30PGC11CP011	DMCW DP ACROSS PHE-A(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
144		20PGC12CP011	30PGC12CP011	DMCW DP ACROSS PHE-B(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
145		20PGC13CP011	30PGC13CP011	DMCW DP ACROSS PHE-C(TG)	DPT	DMCW	9.5	KG/CM2	0-1	KG/CM2		0	1	1
146		20PGC14CP011	30PGC14CP011	DP ACRS RECIR CV DMCW-25	DPT	DMCW	9.5	KG/CM2	0-1.5	KG/CM2		0	1	1
147		20PGC14CP012	30PGC14CP012	DP ACRS RECIR CV DMCW-25	DPT	DMCW	9.5	KG/CM2	0-1.5	KG/CM2		0	1	1
148		20HAG15CP002	30HAG15CP002	DIFF. PRESSURE ACROSS STARTUP SYSTEM MIXING PIECE	DPT	WATER	333.4	KG/CM2	0-1	KG/CM2		0	1	1
149		20HAG25CP001	30HAG25CP001	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
150		20HAG25CP002	30HAG25CP002	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
151		20HAG25CP003	30HAG25CP003	DIFF. PRESSURE ACROSS BOILER CIRCULATING WATER PUMP	DPT	WATER	171.92	KG/CM2	0-25	KG/CM2		0	1	1
152		20HLB10CP002	30HLB10CP002	FD FAN-A DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	SEC. AIR	-12	mmWC	0 to 600	mmWC		0	1	1
153		20HLB15CP002	30HLB15CP002	FD FAN-B DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	SEC. AIR	-12	mmWC	0 to 600	mmWC		0	1	1
154		20HLA20CP005	30HLA20CP005	DIFF PRESSURE ACROSS SEC AIR LINE APH- A	DPT	SEC. AIR	261 / 176	mmWC	0 to 200	mmWC		0	1	1
155		20HLA25CP005	30HLA25CP005	DIFF PRESSURE ACROSS SEC AIR LINE APH- B	DPT	SEC. AIR	261 / 176	mmWC	0 to 200	mmWC		0	1	1
156		20HFE10CP002	30HFE10CP002	PA FAN-A DP ACROSS SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	PY. AIR	-13	mmWC	0 to 600	mmWC		0	1	1
157		20HFE15CP002	30HFE15CP002	PA FAN-B DP ACROSS SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	PY. AIR	-13	mmWC	0 to 600	mmWC		0	1	1
158		20HFE30CP003	30HFE30CP003	DIFF PRESSURE ACROSS PRIMARY AIR LINE APH- A	DPT	PY. AIR	1055 / 1027	mmWC	0 to 100	mmWC		0	1	1
159		20HFE35CP003	30HFE35CP003	DIFF PRESSURE ACROSS PRIMARY AIR LINE APH- B	DPT	PY. AIR	1055 / 1027	mmWC	0 to 100	mmWC		0	1	1
160		20HHQ10CP001	30HHQ10CP001	DP ACROSS SCANNER AIR FILTER	DPT	SCA. AIR	287	mmWC	0 to 25	mmWC		0	1	1
161		20HBK10CP007	30HBK10CP007	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 to 1300	mmWC		0	1	1
162		20HBK15CP005	30HBK15CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0-1600	mmWC		0	1	1
163		20HBK15CP006	30HBK15CP006	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0-1600	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
164		20HNA27CP002	30HNA27CP002	AIR HEATER-A FLUE GAS LINE DIFF. PRESSURE	DPT	FLUE GAS	-234 / -333	mmWC	0 to 250	mmWC		0	1	1
165		20HNA28CP002	30HNA28CP002	AIR HEATER- B FLUE GAS LINE DIFF. PRESSURE	DPT	FLUE GAS	-234 / -333	mmWC	0 to 250	mmWC		0	1	1
166		20HNC10CP002	30HNC10CP002	ID FAN-A DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	FLUE GAS	-437	mmWC	0 to 600	mmWC		0	1	1
167		20HNC15CP002	30HNC15CP002	ID FAN-B DP BETWEEN SUCTION CHAMBER & UPSTREAM OF IMPELLER HOUSING	DPT	FLUE GAS	-437	mmWC	0 to 600	mmWC		0	1	1
168		20HJF50CP002	30HJF50CP002	DIFF. PRESSURE ACROSS OP. FLOOR STRAINER	DPT	LDO	20	KG/CM2	0-1	KG/CM2		0	1	1
169		20HJF73CP001	30HJF73CP001	DIFF. PRESSURE ACROSS STRAINER AT DRAIN OIL PUMP INLET	DPT	LDO	0	KG/CM2	0-1	KG/CM2		0	1	1
170		20HFW01CP001	30HFW01CP001	DYNAVANE FILTER-1 DIFFERENTIAL PRESSURE	DPT	SEAL AIR	1055 / 899	mmWC	(-)50 to 50	mmWC		0	1	1
171		20HFW02CP001	30HFW02CP001	DYNAVANE FILTER-2 DIFFERENTIAL PRESSURE	DPT	SEAL AIR	1055 / 899	mmWC	(-)50 to 50	mmWC		0	1	1
172		20QFB10CP101	30QFB10CP101	INSTRUMENT AIR HEADER PRESSURE	PT	AIR	7	KG/CM2	0-10	KG/CM2		0	1	1
173		20LAA01CP011	30LAA01CP011	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
174		20LAA01CP012	30LAA01CP012	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
175		20LAA01CP013	30LAA01CP013	DEAERATOR PRESS	PT	STEAM	12.2	KG/CM2	0-20	KG/CM2		0	1	1
176		20LBQ10CP011	30LBQ10CP011	CRH PEG STM PRESS BEF CV	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1
177		20LBQ71CP011	30LBQ71CP011	EXT STM PRESS AT HPH-7A DESH I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
178		20LBQ72CP011	30LBQ72CP011	EXT STM PRESS AT HPH-7B DESH I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
179		20LBQ73CP021	30LBQ73CP021	EXT STM PRESS AT HPH-7A I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
180		20LBQ73CP022	30LBQ73CP022	EXT STM PRESS AT HPH-7A I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
181		20LBQ74CP021	30LBQ74CP021	EXT STM PRESS AT HPH-7B I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
182		20LBQ74CP022	30LBQ74CP022	EXT STM PRESS AT HPH-7B I/L	PT	STEAM	25.99	KG/CM2	0-40	KG/CM2		0	1	1
183		20LBQ81CP019	30LBQ81CP019	EXT STM PRESS AT HPH-8A I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
184		20LBQ81CP020	30LBQ81CP020	EXT STM PRESS AT HPH-8A I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
185		20LBQ82CP017	30LBQ82CP017	EXT STM PRESS. AT HPH-8B I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
186		20LBQ82CP018	30LBQ82CP018	EXT STM PRESS. AT HPH-8B I/L	PT	STEAM	63.8	KG/CM2	0-100	KG/CM2		0	1	1
187		20LBQ91CP015	30LBQ91CP015	EXT STM PRESS AT HPH-9A I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
188		20LBQ91CP016	30LBQ91CP016	EXT STM PRESS AT HPH-9A I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
189		20LBQ92CP013	30LBQ92CP013	EXT STM PRESS AT HPH-9B I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
190		20LBQ92CP014	30LBQ92CP014	EXT STM PRESS AT HPH-9B I/L	PT	STEAM	92.8	KG/CM2	0-140	KG/CM2		0	1	1
191		20LBS31CP011	30LBS31CP011	EXT STM PRESS AT LPH-3 I/L	PT	STEAM	1.52	KG/CM2	(-)1-3	KG/CM2		0	1	1
192		20LBS41CP011	30LBS41CP011	EXT STM PRESS AT LPH-4 I/L	PT	STEAM	3.15	KG/CM2	(-)1-5	KG/CM2		0	1	1
193		20LBS51CP011	30LBS51CP011	EXT STM PRESS AT LPH-5 I/L	PT	STEAM	6.06	KG/CM2	0-10	KG/CM2		0	1	1
194		20LBQ61CP011	30LBQ61CP011	EXT STM PRESS. TO DEA	PT	STEAM	12.83	KG/CM2	0-20	KG/CM2		0	1	1
195		20LBQ61CP012	30LBQ61CP012	EXT STM PRESS. TO DEA	PT	STEAM	12.83	KG/CM2	0-20	KG/CM2		0	1	1
196		20LCC10CP001	30LCC10CP001	LP HEATER-1 SHELL PRESS	PT	STEAM	0.238	KG/CM2	-760mm to 1mm	mm		0	1	1
197		20LCC02CP001	30LCC02CP001	LP HEATER-2 SHELL PRESS	PT	STEAM	0.52	KG/CM2	-760mm to 1mm	mm		0	1	1
198		20LAB10CP011	30LAB10CP011	TDBFP-A BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
199		20LAB20CP011	30LAB20CP011	TDBFP-B BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
200		20LAB30CP011	30LAB30CP011	MDBFP-C BP SUC PRESS	PT	FW	12.83	KG/CM2	0-25	KG/CM2		0	1	1
201		20LAB40CP016	30LAB40CP016	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
202		20LAB40CP015	30LAB40CP015	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
203		20LAB40CP014	30LAB40CP014	BFP DISCH HDR PRESS	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
204		20LAB41CP011	30LAB41CP011	FW PRESS AT HPH-7A I/L	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
205		20LAB42CP011	30LAB42CP011	FW PRESS AFT HPH-7A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
206		20LAB43CP011	30LAB43CP011	FW PRESS AFT HPH-8A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
207		20LAB44CP011	30LAB44CP011	FW PRESS AFT HPH-9A	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
208		20LAB46CP011	30LAB46CP011	FW PRESS AT HPH-7B I/L	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
209		20LAB47CP011	30LAB47CP011	FW PRESS AFT HPH-7B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
210		20LAB48CP011	30LAB48CP011	FW PRESS AFT HPH-8B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
211		20LAB49CP011	30LAB49CP011	FW PRESS AFT HPH-9B	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
212		20LAB60CP011	30LAB60CP011	FW PRESS TO ECO	PT	FW	337.22	KG/CM2	0-500	KG/CM2		0	1	1
213		20LAB24CP101	30LAB24CP101	BFP INT STG TO RH SPRY PRESS	PT	FW	120	KG/CM2	0-250	KG/CM2		0	1	1
214		20LAF20CP011	30LAF20CP011	APRDS SPRAY WTR PRESS AFT CDV-262	PT	COND	32.01	KG/CM2	0-60	KG/CM2		0	1	1
215		20LBG10CP011	30LBG10CP011	MAIN STM PRESS TO APRDS	PT	STEAM	270	KG/CM2	0-400	KG/CM2		0	1	1
216		20LBG10CP012	30LBG10CP012	MAIN STM PRESS TO APRDS	PT	STEAM	270	KG/CM2	0-400	KG/CM2		0	1	1
217		20LBG20CP011	30LBG20CP011	CRH STM PRESS TO APRDS	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
218		20LBG20CP012	30LBG20CP012	CRH STM PRESS TO APRDS	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
219		20LBG30CP011	30LBG30CP011	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
220		20LBG30CP012	30LBG30CP012	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
221		20LBG30CP013	30LBG30CP013	AUX STM HDR PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
222		20LCA20CP011	30LCA20CP011	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
223		20LCA20CP012	30LCA20CP012	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
224		20LCA20CP013	30LCA20CP013	CEP DISCH HDR PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
225		20LCA33CP011	30LCA33CP011	GLAND SEAL WATER HDR PR.	PT	COND	3	KG/CM2	0-6	KG/CM2		0	1	1
226		20LCA33CP012	30LCA33CP012	GLAND SEAL WATER HDR PR.	PT	COND	3	KG/CM2	0-6	KG/CM2		0	1	1
227		20LCA61CP011	30LCA61CP011	LPH-1 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
228		20LCA62CP011	30LCA62CP011	LPH-2 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
229		20LCA82CP011	30LCA82CP011	LPH-3 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
230		20LCA90CP012	30LCA90CP012	DEA I/L COND PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
231		20LCA90CP023	30LCA90CP023	DEA I/L COND PRESS (BEF FE)	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
232		20LCA91CP024	30LCA91CP024	LPH-4 COND O/L PRESS	PT	COND	32.01	KG/CM2	0-50	KG/CM2		0	1	1
233		20LCJ30CP101	30LCJ30CP101	DRIP PMP DISCH HDR PRESS	PT	COND	23.9	KG/CM2	0-50	KG/CM2		0	1	1
234		20PAB10CP011	30PAB10CP011	CW PRESS AT COND-1 I/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
235		20PAB10CP013	30PAB10CP013	CW PRESS AT COND-1 O/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
236		20PAB10CP022	30PAB10CP022	CW PRESS AT COND-2 O/L-L	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
237		20PAB20CP011	30PAB20CP011	CW PRESS AT COND-1 I/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
238		20PAB20CP013	30PAB20CP013	CW PRESS AT COND-1 O/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
239		20PAB20CP022	30PAB20CP022	CW PRESS AT COND-2 O/L-R	PT	CW	3.5	KG/CM2	0-6	KG/CM2		0	1	1
240		20LBQ62CP001	30LBQ62CP001	CRH STM TO BFPT A/B PRESS	PT	STEAM	12	KG/CM2	0-25	KG/CM2		0	1	1
241		20LBQ62CP002	30LBQ62CP002	CRH STM TO BFPT A/B PRESS	PT	STEAM	12	KG/CM2	0-25	KG/CM2		0	1	1
242		20LBG60CP012	30LBG60CP012	AUX STM HDR TO BFP TURBINE PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
243		20LBF10CP011	30LBF10CP011	MS PRESS BEF HPBP-1	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
244		20LBF11CP011	30LBF11CP011	HPBP-1 D/S PRESS	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1
245		20LBF21CP011	30LBF21CP011	HPBP-2 D/S PRESS	PT	STEAM	36.77	KG/CM2	0-80	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
246		20LBA11CP001	30LBA11CP001	MS PRESS AT SH O/L-LEFT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
247		20LBA11CP002	30LBA11CP002	MS PRESS AT SH O/L-LEFT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
248		20LBA12CP006	30LBA12CP006	MS PRESS AT SH O/L-RIGHT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
249		20LBA12CP007	30LBA12CP007	MS PRESS AT SH O/L-RIGHT	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
250		20LBA10CP011	30LBA10CP011	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
251		20LBA10CP012	30LBA10CP012	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
252		20LBA10CP013	30LBA10CP013	MS HDR PRESS (HPBP PRESS CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
253		20LBA10CP014	30LBA10CP014	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
254		20LBA10CP015	30LBA10CP015	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
255		20LBA10CP016	30LBA10CP016	MS HDR PRESS (BOP READY - COMBUSION CTRL)	PT	STEAM	270	KG/CM2	0-350	KG/CM2		0	1	1
256		20LBB11CP011	30LBB11CP011	HRH STM PRESS AT RH O/L - LEFT	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
257		20LBB12CP011	30LBB12CP011	HRH STM PRESS. AT RH O/L - RIGHT	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
258		20LBB21CP011	30LBB21CP011	HRH EQUALISING LINE PRESS	PT	STEAM	60.18	KG/CM2	0-100	KG/CM2		0	1	1
259		20LBC01CP011	30LBC01CP011	CRH STM PRESS AT RH I/L-LEFT	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
260		20LBC02CP011	30LBC02CP011	CRH STM PRESS AT RH I/L-RIGHT	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
261		20LBC10CP011	30LBC10CP011	CRH STM HDR PRESS AFT NRV	PT	STEAM	65.06	KG/CM2	0-100	KG/CM2		0	1	1
262		20MAA50CP004	30MAA50CP004	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
263		20MAA50CP005	30MAA50CP005	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
264		20MAA50CP006	30MAA50CP006	1ST STAGE TURBINE PRESS.	PT	STEAM	279	KG/CM2	0-350	KG/CM2		0	1	1
265		20SDA10CP001	30SDA10CP001	AIR HEATER WTR WASH LINE PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
266		20SGA10CP001	30SGA10CP001	AIR HEATER FIRE FIGHT LINE PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
267		20LBG80CP002	30LBG80CP002	AUX STEAM PRESS FOR MILL INERTING	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
268		20LBG80CP001	30LBG80CP001	AUX STEAM PRESS FOR MILL INERTING	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
269		20PGC00CP011	30PGC00CP011	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
270		20PGC00CP012	30PGC00CP012	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
271		20PGC00CP013	30PGC00CP013	DMCW PUMP SUC HDR PRESS	PT	DMCW	4.5	KG/CM2	0-10	KG/CM2		0	1	1
272		20PGC10CP011	30PGC10CP011	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
273		20PGC10CP012	30PGC10CP012	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
274		20PGC10CP013	30PGC10CP013	DMCW PUMP DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
275		20PGC20CP011	30PGC20CP011	DMCW PHE O/L DISCH HDR PRESS	PT	DMCW	9.5	KG/CM2	0-15	KG/CM2		0	1	1
276		20PGL40CP011	30PGL40CP011	DMCW SUC HDR PR AT BFP MTR CLR I/L	PT	DMCW	9.5	KG/CM2	0-16	KG/CM2		0	1	1
277		20HAC10CP001	30HAC10CP001	ECO. INLET LINK PRESSURE AFTER FLOW NOZZLE	PT	WATER	332.2	KG/CM2	0-500	KG/CM2		0	1	1
278		20LAE20CP001	30LAE20CP001	RH/DSH SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	200	KG/CM2	0-300	KG/CM2		0	1	1
279		20SGA51CP002	30SGA51CP002	FIRE WTR TO MILL E TO J PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
280		20SGA51CP001	30SGA51CP001	FIRE WTR TO MILL A TO D PRESS	PT	WATER	7	KG/CM2	0-16	KG/CM2		0	1	1
281		20LAE70CP001	30LAE70CP001	SH DSH-1 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	322.2	KG/CM2	0-400	KG/CM2		0	1	1
282		20LAE90CP001	30LAE90CP001	SH DSH-2 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	PT	WATER	332.2	KG/CM2	0-400	KG/CM2		0	1	1
283		20HAH01CP001	30HAH01CP001	WATER SEPERATOR 'A' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
284		20HAH01CP002	30HAH01CP002	WATER SEPERATOR 'A' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
285		20HAH02CP001	30HAH02CP001	WATER SEPERATOR 'B' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
286		20HAH02CP002	30HAH02CP002	WATER SEPERATOR 'B' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
287		20HAH03CP001	30HAH03CP001	WATER SEPERATOR 'C' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
288		20HAH03CP002	30HAH03CP002	WATER SEPERATOR 'C' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
289		20HAH04CP001	30HAH04CP001	WATER SEPERATOR 'D' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
290		20HAH04CP002	30HAH04CP002	WATER SEPERATOR 'D' OUTLET PRESSURE	PT	STEAM	306	KG/CM2	0-400	KG/CM2		0	1	1
291		20HAD81CP001	30HAD81CP001	WATER SEPERATOR STORAGE TANK 'A' PRESSURE	PT	WATER	300	KG/CM2	0-400	KG/CM2		0	1	1
292		20HAD82CP001	30HAD82CP001	WATER SEPERATOR STORAGE TANK 'B' PRESSURE	PT	WATER	300	KG/CM2	0-400	KG/CM2		0	1	1
293		20HAG15CP001	30HAG15CP001	WATER STORAGE DOWNCOMER PRESSURE	PT	WATER	298.5	KG/CM2	0-400	KG/CM2		0	1	1
294		20HLB10CP001	30HLB10CP001	FD FAN-A SUCTION CHAMBER PRESSURE	PT	SEC. AIR	-12	mmWC	(-60) to 0	mmWC		0	1	1
295		20HLB15CP001	30HLB15CP001	FD FAN-B SUCTION CHAMBER PRESSURE	PT	SEC. AIR	-12	mmWC	(-60) to 0	mmWC		0	1	1
296		20HLB10CP003	30HLB10CP003	FD FAN-A OUTLET PRESSURE AT DIFFUSER	PT	SEC. AIR	287	mmWC	0 to 600	mmWC		0	1	1
297		20HLB15CP003	30HLB15CP003	FD FAN-B OUTLET PRESSURE AT DIFFUSER	PT	SEC. AIR	287	mmWC	0 to 600	mmWC		0	1	1
298		20HLA20CP004	30HLA20CP004	AH-A SEC. AIR INLET PRESSURE	PT	SEC. AIR	261	mmWC	0 to 500	mmWC		0	1	1
299		20HLA25CP004	30HLA25CP004	AH-B SEC. AIR INLET PRESSURE	PT	SEC. AIR	261	mmWC	0 to 500	mmWC		0	1	1
300		20HLA30CP002	30HLA30CP002	AH-A SEC. AIR OUTLET PRESSURE	PT	SEC. AIR	176	mmWC	0 to 400	mmWC		0	1	1
301		20HLA35CP002	30HLA35CP002	AH-B SEC. AIR OUTLET PRESSURE	PT	SEC. AIR	176	mmWC	0 to 400	mmWC		0	1	1
302		20HFE10CP001	30HFE10CP001	PA FAN-A SUCTION CHAMBER PRESSURE	PT	PY. AIR	-13	mmWC	(-60) to 0	mmWC		0	1	1
303		20HFE15CP001	30HFE15CP001	PA FAN-B SUCTION CHAMBER PRESSURE	PT	PY. AIR	-13	mmWC	(-60) to 0	mmWC		0	1	1
304		20HFE10CP003	30HFE10CP003	PA FAN-A OUTLET PRESSURE AT DIFFUSER	PT	PY. AIR	1076	mmWC	0 to 1600	mmWC		0	1	1
305		20HFE15CP003	30HFE15CP003	PA FAN-B OUTLET PRESSURE AT DIFFUSER	PT	PY. AIR	1076	mmWC	0 to 1600	mmWC		0	1	1
306		20HFE30CP001	30HFE30CP001	AH-A PY. AIR INLET PRESSURE	PT	PY. AIR	1055	mmWC	0 to 1600	mmWC		0	1	1
307		20HFE35CP001	30HFE35CP001	AH-B PY. AIR INLET PRESSURE	PT	PY. AIR	1055	mmWC	0 to 1600	mmWC		0	1	1
308		20HFE40CP002	30HFE40CP002	AH-A PY. AIR OUTLET PRESSURE	PT	PY. AIR	1027	mmWC	0 to 1600	mmWC		0	1	1
309		20HFE45CP002	30HFE45CP002	AH-B PY. AIR OUTLET PRESSURE	PT	PY. AIR	1027	mmWC	0 to 1600	mmWC		0	1	1
310		20HHQ20CP001	30HHQ20CP001	SCANNER AIR FAN OUTLET PRESSURE	PT	SCA. AIR	--	mmWC	0 -800	mmWC		0	1	1
311		20HHL20CP001	30HHL20CP001	WIND BOX PRESSURE - LEFT	PT	SEC. AIR	102	mmWC	0 to 200	mmWC		0	1	1
312		20HHL25CP001	30HHL25CP001	WIND BOX PRESSURE - RIGHT	PT	SEC. AIR	102	mmWC	0 to 200	mmWC		0	1	1
313		20HBK10CP001	30HBK10CP001	FURNACE PRESSURE (WIDE RANGE) - LEFT	PT	FLUE GAS	-5	mmWC	(-)1200 to 1200	mmWC		0	1	1
314		20HBK10CP003	30HBK10CP003	FURNACE PRESSURE - LEFT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
315		20HBK10CP004	30HBK10CP004	FURNACE PRESSURE - LEFT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
316		20HBK15CP003	30HBK15CP003	FURNACE PRESSURE - RIGHT	PT	FLUE GAS	-5	mmWC	(-)200 to 200	mmWC		0	1	1
317		20HBK20CP001	30HBK20CP001	PLATEN SH OUTLET PRESSURE- LEFT	PT	FLUE GAS	-7	mmWC	0 to (-)25	mmWC		0	1	1
318		20HBK25CP001	30HBK25CP001	PLATEN SH OUTLET PRESSURE- RIGHT	PT	FLUE GAS	-7	mmWC	0 to (-)25	mmWC		0	1	1
319		20HBK30CP001	30HBK30CP001	FINISH RH OUTLET PRESSURE- LEFT	PT	FLUE GAS	-9	mmWC	0 to (-)25	mmWC		0	1	1
320		20HBK35CP001	30HBK35CP001	FINISH RH OUTLET PRESSURE- RIGHT	PT	FLUE GAS	-9	mmWC	0 to (-)25	mmWC		0	1	1
321		20HBK40CP001	30HBK40CP001	FINISH SH OUTLET PRESSURE - LEFT	PT	FLUE GAS	-37	mmWC	0 to (-)75	mmWC		0	1	1
322		20HBK45CP001	30HBK45CP001	FINISH SH OUTLET PRESSURE - RIGHT	PT	FLUE GAS	-37	mmWC	0 to (-)75	mmWC		0	1	1
323		20HBK50CP001	30HBK50CP001	LTRH OUTLET (ECONOMISER INLET) PRESSURE - LEFT	PT	FLUE GAS	-54	mmWC	0 to (-)150	mmWC		0	1	1
324		20HBK55CP001	30HBK55CP001	LTRH OUTLET (ECONOMISER INLET) PRESSURE - RIGHT	PT	FLUE GAS	-54	mmWC	0 to (-)150	mmWC		0	1	1
325		20HNA27CP001	30HNA27CP001	AIR HEATER-A FLUE GAS INLET PRESSURE	PT	FLUE GAS	-234	mmWC	0 to (-)500	mmWC		0	1	1
326		20HNA28CP001	30HNA28CP001	AIR HEATER- B FLUE GAS INLET PRESSURE	PT	FLUE GAS	-234	mmWC	0 to (-)500	mmWC		0	1	1
327		20HNA30CP001	30HNA30CP001	AIR HEATER-A FLUE GAS OUTLET PRESSURE	PT	FLUE GAS	-333	mmWC	0 to (-)600	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
328		20HNA35CP001	30HNA35CP001	AIR HEATER- B FLUE GAS OUTLET PRESSURE	PT	FLUE GAS	-333	mmWC	0 to (-)600	mmWC		0	1	1
329		20HNC10CP001	30HNC10CP001	ID FAN-A INLET SUCTION CHAMBER PRESSURE	PT	FLUE GAS	-437	mmWC	0 to (-)800	mmWC		0	1	1
330		20HNC15CP001	30HNC15CP001	ID FAN-B INLET SUCTION CHAMBER PRESSURE	PT	FLUE GAS	-437	mmWC	0 to (-)800	mmWC		0	1	1
331		20HNC10CP003	30HNC10CP003	ID FAN-A OUTLET DIFFUSER PRESSURE	PT	FLUE GAS	251	mmWC	0 to 500	mmWC		0	1	1
332		20HNC15CP003	30HNC15CP003	ID FAN-B OUTLET DIFFUSER PRESSURE	PT	FLUE GAS	251	mmWC	0 to 500	mmWC		0	1	1
333		20LBG70CP001	30LBG70CP001	AUX STEAM TO SCAPH PRESS	PT	STEAM	16	KG/CM2	0-25	KG/CM2		0	1	1
334		20QHX10CP001	30QHX10CP001	DMCW SUPPLY PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
335		20QHX20CP001	30QHX20CP001	CW BSTR PUMPS DISCH PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
336		20QHX11CP001	30QHX11CP001	DMCW RETURN PRESS	PT	DMCW	6	KG/CM2	0-16	KG/CM2		0	1	1
337		20HJF50CP006	30HJF50CP006	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	KG/CM2	0-25	KG/CM2		0	1	1
338		20HJF50CP007	30HJF50CP007	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	KG/CM2	0-25	KG/CM2		0	1	1
339		20HFE71CP001	30HFE71CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
340		20HFE72CP001	30HFE72CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
341		20HFE73CP001	30HFE73CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
342		20HFE74CP001	30HFE74CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
343		20HFE75CP001	30HFE75CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
344		20HFE76CP001	30HFE76CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
345		20HFE77CP001	30HFE77CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
346		20HFE78CP001	30HFE78CP001	MIXED PA PRESSURE BEFORE VENTURI	PT	HOT PY. AIR	903	mmWC	0-1300	mmWC		0	1	1
347		20HFW20CP003	30HFW20CP003	SEAL AIR FAN DISCHARGE PRESSURE	PT	SEAL AIR	1076	mmWC	0-1600	mmWC		0	1	1
348		20QEB10CP101	30QEB10CP101	SERVICE AIR HEADER PRESSURE	PT	AIR	7	KG/CM2	0-10	KG/CM2		0	1	1
349		20QFA10CP001	30QFA10CP001	INSTRUMENT AIR HEADER PRESSURE	PT	COMPRESSED AIR	7	KG/CM2	0-16	KG/CM2		0	1	1
350		20QFB10CP001	30QFB10CP001	SERVICE AIR HEADER PRESSURE	PT	COMPRESSED AIR	7	KG/CM2	0-16	KG/CM2		0	1	1
351		20HHQ20CP002	30HHQ20CP002	SCANNER AIR/FURNACE DIFF. PRESSURE	DPT	SCA. AIR / FLUE GAS	537/ -5	mmWC	0 - 800	mmWC		0	1	1
352		20HHQ20CP003	30HHQ20CP003	SCANNER AIR/FURNACE DIFF. PRESSURE	DPT	SCA. AIR / FLUE GAS	537/ -5	mmWC	0 - 800	mmWC		0	1	1
353		20HBK10CP002	30HBK10CP002	FURNACE TO WINDBOX DIFF. PRESS. - LEFT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
354		20HBK10CP005	30HBK10CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
355		20HBK10CP005	30HBK10CP005	FURNACE TO HOT PA HEADER DIFF. PRESSURE - LEFT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
356		20HBK15CP001	30HBK15CP001	FURNACE TO WINDBOX DIFF. PRESS. - RIGHT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
357		20HBK15CP002	30HBK15CP002	FURNACE TO WINDBOX DIFF. PRESS. - RIGHT	DPT	FLUE GAS / SEC AIR	-5 / 102	mmWC	0 - 300	mmWC		0	1	1
358		20HBK15CP004	30HBK15CP004	FURNACE TO HOT PA HEADER DIFF. PRESSURE - RIGHT	DPT	FLUE GAS / PY. AIR	-5 / 991	mmWC	0 - 1600	mmWC		0	1	1
359		20HHL41CF001	30HHL41CF001	L-SOFA CORNER-1 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
360		20HHL44CF002	30HHL44CF002	H-SOFA FRONT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
361		20HHL42CF001	30HHL42CF001	L-SOFA CORNER-2 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
362		20HHL41CF002	30HHL41CF002	H-SOFA LEFT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
363		20HHL43CF001	30HHL43CF001	L-SOFA CORNER-3 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
364		20HHL42CF002	30HHL42CF002	H-SOFA REAR WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
365		20HHL44CF001	30HHL44CF001	L-SOFA CORNER-4 FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 140	T/HR	DP = 0 - 20 mmWC	0	1	1
366		20HHL43CF002	30HHL43CF002	H-SOFA RIGHT WALL FLOW TRANSMITTER	FT-DP	SEC. AIR	112	mmWC	0 - 190	T/HR	DP = 0 - 15 mmWC	0	1	1
367		20HFW20CP001	30HFW20CP001	SEAL AIR FAN DISCHARGE/ CPA HEADER DIFF. PRESSURE	DPT	SEAL AIR / COLD PA	1076 / 1055	mmWC	0 - 400	mmWC		0	1	1
368		20HFW20CP002	30HFW20CP002	SEAL AIR FAN DISCHARGE/ CPA HEADER DIFF. PRESSURE	DPT	SEAL AIR / COLD PA	1076 / 1055	mmWC	0 - 400	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
369		20HFW21CP001	30HFW21CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
370		20HFW21CP002	30HFW21CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
371		20HFW22CP001	30HFW22CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
372		20HFW22CP002	30HFW22CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
373		20HFW23CP001	30HFW23CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
374		20HFW23CP002	30HFW23CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
375		20HFW24CP001	30HFW24CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
376		20HFW24CP002	30HFW24CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
377		20HFW25CP001	30HFW25CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
378		20HFW25CP002	30HFW25CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
379		20HFW26CP001	30HFW26CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
380		20HFW26CP002	30HFW26CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
381		20HFW27CP001	30HFW27CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
382		20HFW27CP002	30HFW27CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
383		20HFW28CP001	30HFW28CP001	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
384		20HFW28CP002	30HFW28CP002	MILL A-H SEAL AIR TO UNDER BOWL DIFF. PRESSURE	DPT	SEAL AIR	1076/ 903	mmWC	0 - 400	mmWC		0	1	1
385		20HFC01CP001	30HFC01CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
386		20HFC01CP002	30HFC01CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
387		20HFC02CP001	30HFC02CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
388		20HFC02CP002	30HFC02CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
389		20HFC03CP001	30HFC03CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
390		20HFC03CP002	30HFC03CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
391		20HFC04CP001	30HFC04CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
392		20HFC04CP002	30HFC04CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
393		20HFC05CP001	30HFC05CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
394		20HFC05CP002	30HFC05CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
395		20HFC06CP001	30HFC06CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
396		20HFC06CP002	30HFC06CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
397		20HFC07CP001	30HFC07CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
398		20HFC07CP002	30HFC07CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
399		20HFC08CP001	30HFC08CP001	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
400		20HFC08CP002	30HFC08CP002	MILL A-H BOWL DIFF. PRESSURE	DPT	COAL + AIR	903 / 422	mmWC	0 - 400	mmWC		0	1	1
401		20LBA11CP001	30LBA11CP001	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
402		20LBA11CP002	30LBA11CP002	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
403		20LBA11CP003	30LBA11CP003	MAIN STEAM LINE PRESSURE -LEFT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
404		20LBA12CP001	30LBA12CP001	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
405		20LBA12CP002	30LBA12CP002	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
406		20LBA12CP003	30LBA12CP003	MAIN STEAM LINE PRESSURE -RIGHT	PT	STEAM	278	kg/cm ²	0 - 400	kg/cm ²		0	1	1
407		20HCB01CP004	30HCB01CP004	SB STEAM PRESSURE BEFORE SBPRV	PT	STEAM	294.6	kg/cm ²	0 - 400	kg/cm ²		0	1	1
408		20HCB01CP001	30HCB01CP001	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
409		20HCB01CP002	30HCB01CP002	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
410		20HCB01CP003	30HCB01CP003	SB STEAM PRESSURE AFTER SBPRV	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
411		20HCB01CF001	30HCB01CF001	SB STEAM SUPPLY FLOW	FT-DP	STEAM	40	kg/cm ²	0 - 22	T/HR	DP range = 0 - 24000 mmWC	0	1	1
412		20HCB13CF001	30HCB13CF001	SB RETRACTS STEAM FLOW - RIGHT	FT-DP	STEAM	40	kg/cm ²	0 - 11	T/HR	DP range = 0 - 10000 mmWC	0	1	1
413		20HCB14CF001	30HCB14CF001	WALL BLOWER STEAM FLOW - RIGHT & REAR	FT-DP	STEAM	40	kg/cm ²	0 - 8	T/HR	DP range = 0 - 2500 mmWC	0	1	1
414		20HCB05CP001	30HCB05CP001	AH-A HOT END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
415		20HCB06CP001	30HCB06CP001	AH-A COLD END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
416		20HCB07CP001	30HCB07CP001	AH-B HOT END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
417		20HCB08CP001	30HCB08CP001	AH-B COLD END DA HEAD PRESSURE	PT	STEAM	40	kg/cm ²	0 - 75	kg/cm ²		0	1	1
418		20HCB12CF001	30HCB12CF001	WALL BLOWER STEAM FLOW - LEFT & FRONT	FT-DP	STEAM	40	kg/cm ²	0 - 8	T/HR	DP range = 0 - 2500 mmWC	0	1	1
419		20HCB11CF001	30HCB11CF001	SB RETRACTS STEAM FLOW - LEFT	FT-DP	STEAM	40	kg/cm ²	0 - 11	T/HR	DP range = 0 - 10000 mmWC	0	1	1
420		20HJN10CP001	30HJN10CP001	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
421		20HJN10CP002	30HJN10CP002	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
422		20HJN10CP003	30HJN10CP003	ATOMISING AIR HEADER PRESSURE	PT	ATOM. AIR	7	kg/cm ²	0 - 10	kg/cm ²		0	1	1
423		20HJF50CP001	30HJF50CP001	PRESSURE BEFORE OP. FLOOR STRAINER	PT	LDO	20	kg/cm ²	0 - 30	kg/cm ²		0	1	1
424		20HJF50CP003	30HJF50CP003	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
425		20HJF50CP004	30HJF50CP004	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
426		20HJF50CP005	30HJF50CP005	LDO HEADER PRESSURE	PT	LDO	14.7 to 4.3	kg/cm ²	0 - 25	kg/cm ²		0	1	1
427		20HLD01CP101	30HLD01CP101	APH A - Alarm at Air line system to Air Motor PT1	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
428		20HLD01CP102	30HLD01CP102	APH A - Alarm at Air line system to Air Motor PT2	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
429		20HLD02CP101	30HLD02CP101	APH B - Alarm at Air line system to Air Motor PT1	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
430		20HLD02CP102	30HLD02CP102	APH B - Alarm at Air line system to Air Motor PT2	PT	Air	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
431		20HLD01CP104	30HLD01CP104	APH-A - Guide bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
432		20HLD01CP105	30HLD01CP105	APH-A -Support bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
433		20HLD02CP104	30HLD02CP104	APH-B - Guide bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
434		20HLD02CP105	30HLD02CP105	APH-B -Support bearing common PT	PT	Lubricant Oil	5	kg/cm ²	0 - 10	kg/cm ²		0	1	1
435		20HNC10CP007	30HNC10CP007	PT for ID Fan A Sealing/Cooling Air Fan	PT	Air	200	mmWC	0-500	mmWC		0	1	1
436		20HNC20CP007	30HNC20CP007	PT for ID Fan B Sealing/Cooling Air Fan	PT	Air	200	mmWC	0-500	mmWC		0	1	1
437		20HNC10CP029	30HNC10CP029	ID Fan A Suction DPT	DPT	Air	200	mmWC	0-600	mmWC		0	1	1
438		20HNC20CP029	30HNC20CP029	ID Fan B Suction DPT	DPT	Air	200	mmWC	0-600	mmWC		0	1	1
439		20HNC10CP001	30HNC10CP001	ID Fan A Suction PT	PT	Air	200	mmWC	-800 TO 0	mmWC		0	1	1
440		20HNC20CP001	30HNC20CP001	ID Fan B Suction PT	PT	Air	200	mmWC	-800 TO 0	mmWC		0	1	1
441		20HNC10CP001	30HNC10CP001	ID Fan A Discharge PT	PT	Air	200	mmWC	0-600	mmWC		0	1	1
442		20HNC20CP001	30HNC20CP001	ID Fan B Discharge PT	PT	Air	200	mmWC	0-600	mmWC		0	1	1
443		20HLB10CP001	30HLB10CP001	FD Fan A Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
444		20HLB20CP001	30HLB20CP001	FD Fan B Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
445		20HLB10CP002	30HLB10CP002	FD Fan A Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
446		20HLB20CP002	30HLB20CP002	FD Fan B Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
447		20HLA10CP401	30HLA10CP401	FD Fan A Suction PT	PT	Air		mmWC	0-600	mmWC		0	1	1
448		20HLA20CP401	30HLA20CP401	FD Fan B Suction PT	PT	Air		mmWC	0-600	mmWC		0	1	1
449		20HFE10CP001	30HFE10CP001	PA Fan A Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1

SL NO	COMMON AREA KKS TAG	UNIT#2 KKS_TAG	UNIT#3 KKS_TAG	DESCRIPTION	SENSR_TYPE	MEDIUM	OP_PRESS	OP. PRESS UNIT	RANGE	RANGE UNIT	REMARKS	COMMON AREA QTY	UNIT # 2 QTY	UNIT # 3 QTY
450		20HFE20CP001	30HFE20CP001	PA Fan B Suction PT	PT	Air		mmWC	-60 TO 0	mmWC		0	1	1
451		20HFE10CP002	30HFE10CP002	PA Fan A Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
452		20HFE20CP002	30HFE20CP002	PA Fan B Suction DPT	DPT	Air		mmWC	0-600	mmWC		0	1	1
453		20HFE10CP401	30HFE10CP401	PA Fan A Discharge PT	PT	Air		mmWC	0-1600	mmWC		0	1	1
454		20HFE20CP401	30HFE20CP401	PA Fan B Discharge PT	PT	Air		mmWC	0-1600	mmWC		0	1	1
455		20HNA70CP001	30HNA70CP001	UNIT-1 ID FAN A Outlet gate SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
456		20HNA75CP001	30HNA75CP001	UNIT-1 ID FAN B Outlet gate SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
457		20HFE30CP002	30HFE30CP002	UNIT-1 PA AH INLET Damper APH B SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
458		20HFE35CP002	30HFE35CP002	UNIT-1 PA AH INLET Damper APH A SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
459		20HFE45CP001	30HFE45CP001	UNIT-1 PA AH OutLET Damper APH B SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
460		20HFE40CP001	30HFE40CP001	UNIT-1 PA AH OutLET Damper APH A SEAL AIR LINE	PT	Air		mmWC	0-1500	mmWC		0	1	1
461		20HLA20CP002	30HLA20CP002	UNIT-1 SCAPH INLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
462		20HLA20CP003	30HLA20CP003	UNIT-1 SCAPH OUTLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
463		20HLA25CP002	30HLA25CP002	UNIT-1 SCAPH INLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
464		20HLA25CP003	30HLA25CP003	UNIT-1 SCAPH OUTLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
465		20HLA20CP001	30HLA20CP001	UNIT-1 SA AH INLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
466		20HLA25CP001	30HLA25CP001	UNIT-1 SA AH INLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-600	mmWC		0	1	1
467		20HLA30CP001	30HLA30CP001	UNIT-1 SA AH OUTLET DAMPER APH A SEAL AIR LINE	PT	Air		mmWC	0-500	mmWC		0	1	1
468		20HLA35CP001	30HLA35CP001	UNIT-1 SA AH OUTLET DAMPER APH B SEAL AIR LINE	PT	Air		mmWC	0-500	mmWC		0	1	1
469		20HNA10CP001	30HNA10CP001	UNIT-1 SCR A BYPASS DAMPER SEAL AIR LINE	PT	Air		mmWC	0-400	mmWC		0	1	1
470		20HNA20CP001	30HNA20CP001	UNIT-1 SCR B BYPASS DAMPER SEAL AIR LINE	PT	Air		mmWC	0-400	mmWC		0	1	1
471		20HNA30CP002	30HNA30CP002	UNIT-1 FLUE HAS AH A OUTLET DAMPER A SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
472		20HNA30CP003	30HNA30CP003	UNIT-1 FLUE HAS AH A OUTLET DAMPER B SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
473		20HNA35CP002	30HNA35CP002	UNIT-1 FLUE HAS AH B OUTLET DAMPER A SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
474		20HNA35CP003	30HNA35CP003	UNIT-1 FLUE HAS AH B OUTLET DAMPER B SEAL AIR LINE	PT	Air		mmWC	0-100	mmWC		0	1	1
												4	470	470



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REFERENCE QUALITY PLAN FOR ELECTRONIC TRANSMITTERS

REVISION : 00

APPROVED
&
VERIFIED

SAILENDRA KUMAR KISAN

PREPARED


Sandeep


ISSUED

416

DATE

30/10/2024

		Manufacturer's Name & Address:-		MANUFACTURING QUALITY PLAN				Project:						
				ITEM				DOC NO:						
				Confirming to code: BS 6447 & IEC 60770				Customer: Consultant: 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				D*	M	C	N	
1	2	3	4	5	6a	6b	7	8	9		10			11
1.00	Raw Materials													
1.01	Raw Materials & Components (Diaphragm, Sensing, Material, 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													
2.01	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	-	-	
		b) Insulation Resistance & Dielectric strength	Major	Measurement / Visual	100%	-	-	"	-	-	P	-	-	
3.00	Final Inspection													
3.01	Routine Test	a) Dimensional details & Visual checking (Size, Rating, Make, Type/ Model No., Serial No./ Tag)	Major	Measurement / Visual	100%	10%	Purchase Order Specification / Approved Drawing / Approved Datasheet	Purchase Order Specification / Approved Drawing / Approved Datasheet	TC	✓	P	V	V	
		b) Process connection / Electric Connection	Major	Measurement / Visual	100%	10%	"	"	"	✓	P	V	V	
		c) Accuracy, repeatability, hydro test, leak test, Calibration & Over range test	Major	Measurement	100%	10%	Purchase Order Specification / Approved Drawing / Approved Datasheet / Mfrs Catalogues / BS 6447 / IEC-60770	Purchase Order Specification / Approved Drawing / Approved Datasheet / Mfrs Catalogues / BS 6447 / IEC-60770	"	✓	P	V	V	Communication for HART Protocol shall be checked during Calibration
4.00	Packing & Dispatch	d) Effect of output load	Major	Measurement	One of Each Type	One of Each Type	Purchase Order Specification / Approved Drawing / Approved Datasheet / Mfrs Catalogues / BS 6447 / IEC-60770	Purchase Order Specification / Approved Drawing / Approved Datasheet / Mfrs Catalogues / BS 6447 / IEC-60770	TC	✓	P	V	V	

		Manufacturer's Name & Address:-		MANUFACTURING QUALITY PLAN			Project:							
				ITEM			DOC NO:							
				Confirming to code: BS 6447 & IEC 60770			Customer: Consultant: 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				D*	M	C	N	
1	2	3	4	5	6a	6b	7	8	9	10	11			
		a) Completeness of TC's, COC's, Inspection Reports.	Major	Verification	100%	100%	Ord Specn & QP	Ord Specn & QP	Documents	-	P	V	V	
		b) Identification Marking / Tagging of each instrument	Major	Verification	100%	100%	Ord Specn	Ord Specn	Internal Records	-	P	V	-	
		c) Soundness of Packing against Transit Damage	Major	Verification	100%	-	Ord Specn	Ord Specn	Internal Records	-	P	-	-	
Note :		1) Manufacturer to maintain calibrated instrument having better accuracy than the item under the test. Inspection Engineer shall check the same.												
		2) Since the transmitter are imported, calibration test reports/certificates and COC will be provided for review and dispatch clearance												
Manufacturer/ Sub contractor:		Contractor: M/s. BHEL-EDN,		LEGEND: * 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				For Customer use:-						
		Signature & Date						Reviewed By						
								Name & Sign of approving authority & Seal						