

**PRE-QUALIFICATION REQUIREMENT**

Dt: 16-09-2023

- 1) Conductivity transmitter W96415206940
- 2) Conductivity probe W96415203339
- 3) Flow Thru chamber W96415203347

**A- Common qualification requirements for Conductivity transmitter W96415206940 & Conductivity probe W96415203339**

1. Bidder shall be manufacturer or authorized supplier of Conductivity Transmitter and Probe. Letter of authorization or suitable document shall be submitted in support for the same.
2. Bidder must have supplied 15 or more Conductivity transmitters+ probe in last 5 years from date of enquiry. Out of these at least 2 orders must be of 4 or more Units each. PO copies to be provided in support of the same.

**B- Technical requirement for Conductivity transmitter code W96415206940:-**

(Refer Note 1 below also)

- Suitable for measuring conductivity of DM water.
- HART Smart Two wire 24V,  $\mu$ P based programmable.
- Covers measuring range 0-5  $\mu$ Siemens/cm, Output signal 4-20mA.
- Protection class IP65 or better.

Permissible load burden shall be 400  $\Omega$  or better.

Bidder to submit data sheet/ document in support of above features. It should indicate important parameters linking with national/international standard.

**C- Technical requirement for Conductivity Probe code W96415203339:-**

(Refer Note 1 below also)

- Sensor shall be continuous flow through type with Cell constant of probe 0.05 or better.
- Material of electrodes shall be stainless steel.
- Temperature compensation thermometer Pt100 or Pt1000 shall also be fitted inside the sensor.

Bidder to submit data sheet/ document in support of above features. It should indicate important parameters linking with national/international standard.

**D- PQR applicable for Flow- Thru-chamber Chamber code W96415203347:-**

- Item shall be suitable for mounting the offered Probe. Item automatically qualifies, on PQR qualification of Conductivity Probe & Transmitter.

Notes: -

- (1) Conductivity transmitter and Probe work in pair. Hence both Conductivity transmitter and Probe shall qualify their respective PQR independently, for purchase of either item. Failure to qualify PQR by either transmitter or Probe shall automatically disqualify the other.
- (2) All 3 items to be procured from the same vendor.
- (3) The conductivity transmitter shall be used in Power Plant for DM water (used as cooling medium in Generator) conductivity measurement.
- (4) Bidder to provide reference list of customers of Conductivity Transmitter for our information.
- (5) Bidder to confirm specific compliance wherever asked. BHEL reserves the right to verify information submitted by Bidder. In case the information is found false/ incorrect/ incomplete, the offer shall be rejected.

## **Annexure- B**

### **Framework Confidentiality Agreement (FCA)**

**Framework Confidentiality Agreement cum Undertaking**

This Agreement made on this the \_\_\_\_\_ day of (month) \_\_\_\_\_ 20\_\_\_\_ (“Effective Date”) by and between  
M/s BHARAT HEAVY ELECTRICALS LIMITED, having registered office at “BHEL House”, Siri Fort, New Delhi – 110049 (India), acting through its \_\_\_\_\_ Unit (hereinafter may be referred to as “BHEL” or “the Company”).

And

M/s \_\_\_\_\_ (address) \_\_\_\_\_  
represented by authorized representative Sri \_\_\_\_\_ (herein after referred to as the “Supplier”).

The Supplier and the Company may, unless the context otherwise requires, hereinafter be collectively referred to as “Parties” or singly as the “Party”.

**RECITALS**

Whereas, BHEL is engaged in the design, engineering, manufacturing, construction, testing, commissioning and servicing of a wide range of products, systems and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation, Renewable energy, Oil & Gas and Defence and providing associated services to varied customers in relation to which BHEL/its affiliates own valuable information of a secret and confidential nature.

Whereas the Company may, in connection with Contract(s) (as defined hereunder) placed or to be placed upon the Supplier, or otherwise, from time to time, make available, Technical Information as is defined hereunder.

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

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

**1. Definitions:**

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

- A. **“Contract”** means the Contract entered into with a Supplier and includes a Purchase Order, or a Work Order for procurement of any goods or for provision of any services.
- B. **“Effective Date”** means the date of this Agreement as mentioned in the preamble of this Agreement.

- C. **“Supplier”** includes a Contractor or a Vendor of the Company whether for supplying of goods or for providing any services under a Contract or both.
  - D. **“Technical Information”** includes Drawings, and/or Product Standards and/or Specifications and/or Corporate / Plant Specifications and/or Technological Process Sheets and/or Technical Data Sheets and/or Jigs & Fixtures and/or Pattern & Dies and/or Special Gauges and/or Tools etc. belonging to or wherein the Company has acquired from a third party a right of user and includes any improvement thereto from time to time whether carried out by the Company or by the Supplier.
  - E. **“Intended Purpose”** means the purpose for which the Technical Information is provided to the Supplier under or in connection with a Contract.
  - F. **“Improvement”** includes any modification made to, or adaptation of, the Technical Information which enhances or is calculated to enhance the performance (whether in terms of effectiveness or in terms of efficiency or both) of the product and/or the service to be provided by the Supplier under a Contract.
2. This Agreement shall come into force/deemed to have come into force, as the case may be, on the Effective Date; or, on the first date when the Technical Information or any part thereof is provided by BHEL to the Supplier; whichever is earlier.
3. **Agreement deemed to be incorporated in each Contract:** Unless and to the extent otherwise stipulated in the Contract, the conditions of this Agreement are deemed to be incorporated in all Contracts which may be entered into between the Company and the Supplier. Further, unless otherwise stipulated, the obligations under this Agreement are and will be independent of the obligations under the Contracts and such obligations of the Supplier hereunder will remain of full effect and validity notwithstanding that the period of validity of the Contracts has expired by efflux of time stipulated therein; or, the contract has been discharged by performance or breach; or, the termination of the Contracts for any reason whatsoever.
4. **Ownership:**
- 4.1 The Company may, from time to time, make available to the Supplier, Technical Information on a non-exclusive basis by way of loan.
  - 4.2 The Supplier acknowledges and agrees that all Technical Information and copies thereof that are or may be provided by the Company to the Supplier, are and shall remain the property of BHEL or that of the concerned entity from whom BHEL has obtained the Technical Information and such Technical Information are and shall constitute trade secrets of the BHEL. Nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the Supplier any patent, copyright or design or any other intellectual property rights of whatsoever description that subsists or may hereinafter exist in the Technical Information. Furthermore, nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the Supplier any license or rights of use of such patent, copyright or design or any other

intellectual property rights of whatsoever description which may now or hereafter exist in the Technical Information except for use of the Technical Information strictly in accordance with this Agreement and the Contract and/or as directed in writing by the Company, solely for the Intended Purpose under the Contract.

- 4.3 Neither Party is obligated by or under this Agreement to purchase from or provide to the other Party any service or product and that any such purchase/sale of any product and/or service by one Party to the other Party will be governed by the Contract if any, that may be entered into by and between the Company and the Supplier.
- 4.4 The Supplier is/has been made well aware and acknowledges that the Technical Information being/which may be shared with it by the Company has been either generated by the Company by incurring huge investment and cost or obtained from foreign collaborators under Technical Collaboration Agreement (TCA) with stringent confidentiality conditions.
- 4.5 The Supplier agrees and undertakes to adhere to confidentiality requirements as applicable to BHEL under a TCA and also ensure that the confidentiality requirements are adhered to by all its concerned employees or sub-contractors/suppliers (where permitted to be engaged by BHEL). Any damages, losses, expenses of any description whatsoever, arising out of or in connection with a breach of the confidentiality requirements under a TCA owing to any act or omission on the part of the Supplier or its employees or sub-contractors/suppliers that is claimed by a foreign collaborator from the Company shall be wholly borne by the Supplier and it shall keep BHEL fully indemnified in this behalf. The demand by the Company shall be conclusive upon the Supplier who shall thereupon forthwith pay to the Company without demur, dispute or delay the amount as demanded without demanding any further proof thereof.
- 4.6 The Supplier agrees and undertakes that unless so decided and advised by the Company in writing all rights/title to any Improvement to the Technical Information shall vest in the Company. The Supplier undertakes and agrees to inform forthwith to the Company of any such Improvement made to the Technical Information and transfer all drawings/documents or other materials connected with such Improvement to the Company and also agrees to fully cooperate with the Company for protecting the Company's interests in such Improvement in the Technical Information including but not limited to obtaining necessary protection for the intellectual property rights in such improvement, if so desired by the Company. If a question arises whether a modification amounts to Improvement to the Technical Information, the same shall be decided by the Company and such decision shall be final and binding upon the Supplier.

**5. Use and Non-Disclosure:**

- 5.1 Unless otherwise stipulated by the Company, all Technical Information made available to the Supplier, by the Company shall be treated as Confidential irrespective of whether the same is marked or otherwise denoted to be Confidential or not.

- 5.2 The Supplier undertakes and agrees that the Technical Information in its possession shall be held in strict confidence and will be used strictly in accordance with this Agreement and solely for the Intended Purpose under the Contract. Use of the Technical Information for any other purpose other than Intended Purpose is prohibited.
- 5.3 In particular, the Supplier shall not use Technical Information or any Improvement in its possession for the manufacture or procurement of the Product(s) or components or parts thereof or use the Technical Information or any portion thereof or any modification or adaptation thereof in any form to provide any product and/or service to any third party, without the prior written consent of the Company.
- 5.4 The Supplier shall not disclose any of such Technical Information to any third party without the prior written consent of the Company. The Supplier agrees that without prior written consent of the Company, the Supplier shall not disclose to a third party about the existence of this Agreement, or of the fact that it is/was in possession of or has experience in the use of any Technical Information nor shall the Supplier share in any manner whatsoever, with a third party, the name or details of any Contract(s) awarded by the Company to it or performed by the Supplier or the scope of work thereof or share any document or correspondence by and between the Company and the Supplier in or in connection with this Agreement or such Contract(s). Notwithstanding what is stated elsewhere, the overall responsibility of any breach of the confidentiality provisions under this Agreement shall rest with the Supplier.
- 5.5 The Supplier undertakes and agrees not to make copies or extracts of and not to disclose to others any or all of the Technical Information in its possession, except as follows:
- (a) The Supplier may disclose the Technical Information to such of its officers and employees strictly to the extent as is necessary for such officer or employee for the Intended Purpose, provided that the Confidential Information (or copies thereof) disclosed shall be marked clearly as the confidential and proprietary information of Company and that such officers and employees shall similarly be bound by undertakings of confidence, restricted use and non-disclosure in respect of the Technical Information. The Supplier shall be responsible for any breach of such confidentiality provisions by such officers and employees.
  - (b) With the prior written consent of Company, the Supplier may disclose for the Intended Purpose such Technical Information as is provided for in such consent to such of its professional advisers: consultants, insurers and subcontractors who shall be similarly bound by undertakings of confidence, restricted use and non-disclosure in respect of such Technical Information.
  - (c) The Supplier shall not be prevented to make any disclosure required by (i) order of a court of competent jurisdiction or (ii) any competent regulatory authority or agency where such disclosure is required by law, provided that where the Supplier

intends to make such disclosure, it shall first consult Company and take all reasonable steps requested by it to minimize the extent of the Technical Information disclosed and to make such disclosure in confidence and also shall cooperate with the Company in seeking any protective order or any other remedy from proper authority in this matter.

**6. Exceptions:**

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

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

7. The obligation of maintaining confidentiality of the Technical Information on each occasion, shall subsist for the entire duration during which the Technical Information / equipment is in possession of the Supplier and shall thereafter subsist for a further period of --- years from the date when the complete Technical Information has been returned to the Company and if Technical Information has been returned in portions on different dates then, the period of ---- years will be reckoned from the date when the last portion of the Technical Information has been returned. Notwithstanding the expiry of the confidentiality obligation, the obligation of the Supplier under clause 5.4 shall continue to subsist for a further period of ----- years.

**8. Warranties & Undertakings:**

a) The Supplier undertakes to ensure the due observance of the undertakings of confidence, restricted use and non-disclosure by its persons to whom it discloses or releases copies or extracts of the Technical Information.

b) The Supplier shall keep the Technical Information or improvement made therein properly segregated and not mix up the same with any other material/documents belonging to him/it or to any other third party.

c) The Supplier further undertakes that he/it shall not hypothecate or give on lease or otherwise alienate or do away with any of the Technical Information and/or equipment of the Company, made available to him/it, and undertakes that he/it shall hold the same as a trustee, in capacity of custodian thereof and use/utilise the same solely for the purpose of executing the Contract awarded by the Company.

d) The Supplier further undertakes that he/it shall return all the equipment and/or Technical Information as far as practicable in the same condition in which the same was made available to him/it by the Company together with any Improvement thereon and the documents connected with such Improvement, to the Company forthwith upon completion of the scope

of work or Contract for which such Technical Information was provided by the Company to it or as directed by the Company together with a confirmation by way of an affidavit or in such manner as directed by the Company that it has not retained any equipment and/or Technical Information/Improvement thereof. In case any such equipment and/or Technical Information or Improvement thereof shall remain in his possession or is not capable of being returned, the retention and use of such Technical Information or Improvement thereto shall continue to be governed by this Agreement.

e) The Supplier undertakes to indemnify the Company for all the direct, indirect and/or consequential losses, damages, expenses whatsoever including any consequential loss of business, profits suffered by the Company owing to breach by the Supplier of its obligations under this Agreement and/or the confidentiality requirements, if any, contained in the Contract and that the Supplier hereby agrees that the decision of the Company in all such or any such matter/s shall be final and binding on the Supplier. On mere written demand of the Company, the Supplier shall forthwith and without demur or delay pay to the Company any such sum as determined by the Company as the amount of loss or damage or expense which has been suffered by the Company. The Supplier agrees that the Company shall be entitled to withhold and appropriate any amount payable to the Supplier under any Contract then existing between the Company and the Supplier, in case the Supplier fails to make payment, in terms of the written demand, within 7 days thereof. Without prejudice to the foregoing actions, in respect to any breach of this Agreement, the Company shall be entitled to take any other action against the Supplier as per applicable laws, the Contract, Company's applicable policies, guidelines rules, procedures, etc.

9. Without prejudice to any other mode of recovery as may be available to the Company for recovery of the amount determined as due as per Clause 8(e) hereinabove, the Company shall have a right to withhold, recover and appropriate the amount due towards such losses, damages, expenses, from any amount due to the Supplier in respect of any other Contract (s) placed on him/it by any department/office/Unit/Division of the said Company.

**10. Arbitration & Conciliation:**

a) In case amicable settlement is not reached between the Parties, in respect of any dispute  
or

difference or claim or controversy arising out of the formation, breach, termination, validity or execution of the Contract(or Agreement) or the respective rights and liabilities of the parties or in relation to interpretation of any provision of the Contract or in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference or controversy or claim, (except as to any matters, the decision of which is specifically provided for therein) to the sole arbitration by the arbitrator appointed by Head/In-Charge of the Unit/Division/Region.

b) The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties to the dispute.

c) Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India), or other statutory modifications or re enactments thereof and the rules made thereunder and for

the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be at ----- **(Insert the name of the city/town of the concerned BHEL Unit/Division).**

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

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred to by either party to the arbitration of one of the arbitrators 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.

e) Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Supplier shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and expedition in a professional manner.

**11. Governing Law & Jurisdiction:**

This Agreement shall be governed by and be construed as per applicable Indian Laws in force at the relevant time.

Subject to clauses 10(a) and 10(d) hereinabove, all matters in connection with the subject agreement shall be subject to exclusive jurisdiction of Courts situated at -----**(insert the name of the place where the BHEL Unit/Division is located)**

**SIGNATURE**

**WITNESSES**

1.

Name

Address:

2.

Name:

Address:

# NON-DISCLOSURE AGREEMENT

All Drawing and Technical Documents relating to the product or it's manufacture submitted by one party to the other, prior or subsequent to the formation of contract, shall remain property of the submitting party. Drawing, technical documents or other technical information received by one party, shall not without the consent of the other party, be used for any other purpose than that, for which they were provided. Such technical information shall not without the consent of the submitting party, otherwise be used or copied, reproduced, transmitted or communicated to a third party. Patterns supplied by BHEL will remain BHEL's property which shall be returned by the bidder on demand to BHEL. Bidder shall in no way share or use such intellectual property of BHEL to promote his own business with others. BHEL reserves the right to claim damages from the bidder, or take appropriate penal action as deemed fit against the bidder.

**Signature with stamp**

## **Quality Requirement will be as follows: -**

VENDOR APPROVAL FROM END CUSTOMER (NTPC) IS REQUIRED. UNAPPROVED VENDORS TO PROVIDE CREDENTIALS OF END CUSTOMER/NTPC FORMAT FOR END CUSTOMER /NTPC APPROVAL (IF REQUIRED). VENDOR TO AGREE NTPC APPROVAL TERMS AND CONDITION IF ANY DURING ASSESSMENT. AS OF NOW, VENDORS TO CONFIRM FOR INSPECTION BY BHEL/BHEL TPIA **M/S. QUEST** AS PER ATTACHED BHEL SQP "**QA/BE/QP/317 REV- 07**". VENDOR TO SUBMIT AN ENDORSED COPY OF QP ALONG WITH THE OFFER.

## **Item details are as follows –**

- 1. MATERIAL CODE- W96415203339**  
CONDUCTIVITY SENSOR  
SPEC: TG60196 REV: 08  
**QTY- 06 Nos.**
- 2. MATERIAL CODE- W96415203347**  
FLOW THROUGH CHAMBER WITH 1/2"  
NPT(F) CONNECTIONS AT BOTH  
ENDS FOR FLOW, WITH ADOPTERS  
SPEC: TG60196 REV: 08  
**QTY- 06 Nos.**
- 3. MATERIAL CODE- W96415206940**  
CONDUCTIVITY TRANSMITTER 2 WIRE TYPE  
RANGE 0-5 MICRO SIEMENS/CM  
SPEC: TG60196 REV: 08  
**QTY- 06 Nos.**



**CORPORATE QUALITY ASSURANCE**  
**SUB-VENDOR QUESTIONNAIRE**

<b>i.</b>	<b>Item/Scope of Sub-contracting</b>	
<b>ii.</b>	<b>Address of the registered office</b>	<b>Details of Contact Person</b> (Name, Designation, Mobile, Email)
<b>iii.</b>	<b>Name and Address of the proposed Sub-vendor's works where item is being manufactured</b>	<b>Details of Contact Person:</b> (Name, Designation, Mobile, Email)
<b>iv.</b>	<b>Annual Production Capacity for proposed item/scope of sub-contracting</b>	
<b>v.</b>	<b>Annual production for last 3 years for proposed item/scope of sub-contracting</b>	
<b>vi.</b>	<b>Details of proposed works</b>	
1.	<b>Year of establishment of present works</b>	
2.	<b>Year of commencement of manufacturing at above works</b>	
3.	<b>Details of change in Works address in past (if any)</b>	
4.	<b>Total Area</b>	
	<b>Covered Area</b>	
5.	<b>Factory Registration Certificate</b>	<b>Details attached at Annexure – F2.1</b>
6.	<b>Design/ Research &amp; development set-up (No. of manpower, their qualification, machines &amp; tools employed etc.)</b>	<b>Applicable / Not applicable if manufacturing is as per Main Contractor/purchaser design</b> <b>Details attached at Annexure – F2.2 (if applicable)</b>
7.	<b>Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc)</b>	<b>Details attached at Annexure – F2.3</b>
8.	<b>After sales service set up in India, in case of foreign sub-vendor (Location, Contact Person, Contact details etc.)</b>	<b>Applicable / Not applicable</b> <b>Details attached at Annexure – F2.4</b>
9.	<b>Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any</b>	<b>Details attached at Annexure – F2.5</b>




**CORPORATE QUALITY ASSURANCE**  
**SUB-VENDOR QUESTIONNAIRE**

10.	Quality Control exercised during receipt of raw material/BOI, in-process , Final Testing, packing			Details attached at Annexure – F2.6		
11.	Manufacturing facilities (List of machines, special process facilities, material handling etc.)			Details attached at Annexure – F2.7		
12.	Testing facilities (List of testing equipment)			Details attached at Annexure – F2.8		
13.	If manufacturing process involves fabrication then-			Applicable / Not applicable		
	List of qualified Welders			Details attached at Annexure – F2.9		
	List of qualified NDT personnel with area of specialization			(if applicable)		
14.	List of out-sourced manufacturing processes with Sub-Vendors' names & addresses			Applicable / Not applicable  Details attached at Annexure. –F2.10 (if applicable)		
15.	Supply reference list including recent supplies			Details attached at Annexure – F2.11 (as per format given below)		
<i>Project/ package</i>	<i>Customer Name</i>	<i>Supplied Item (Type/Rating/Model /Capacity/Size etc)</i>	<i>PO ref no/date</i>	<i>Supplied Quantity</i>	<i>Date of Supply</i>	
16.	Product satisfactory performance feedback letter/certificates/End User Feedback			Attached at annexure - F2.12		
17.	Summary of Type Test Report (Type Test Details, Report No, Agency, Date of testing) for the proposed product (similar or higher rating) Note:- Reports need not to be submitted			Applicable / Not applicable  Details attached at Annexure – F2.13 (if applicable)		
18.	Statutory / mandatory certification for the proposed product			Applicable / Not applicable  Details attached at Annexure – F2.14 (if applicable)		
19.	Copy of ISO 9001 certificate (if available)			Attached at Annexure – F2.15		
20.	Product technical catalogues for proposed item (if available)			Details attached at Annexure – F2.16		
<b>Name:</b> _____						
<b>Desig:</b> _____		<b>Sign:</b> _____		<b>Date:</b> _____		

Company's Seal/Stamp:-

MANUFACTURER'S NAME AND ADDRESS		STANDARD QUALITY PLAN					TO BE FILLED BY BHEL		TO BE FILLED BY BHEL			
BHEL	VENDOR'S NAME	ITEM	CONDUCTIVITY MEASURING EQUIPMENT		QP NO.	QA/BE/QP/317						
				REV.	07							
		DRG. NO.	AS PER PO									
		SPEC.	TG 60196									
		REV	AS PER PO		Page 1 of 2							
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS
1	2	3	4	5	6	7	8	9	D	10	11	

1.0 INCOMING INSPECTION												
1.1	Conductivity sensor, conductivity transmitter and other electronic & electrical components	Visual, make, rating, model, type, valve, etc	Major	Visual	100%	TG 60196	TG60196/BOM	Internal records	√	P	V	
1.2	Flow chamber, electrode	Material	Major	Visual	100%	TG 60196	TG60196/BOM	COC	√	P	V	
1.3	Printed Circuit Boards	Visual, finish & dimensions	Major	Visual	100%	TG 60196	TG60196/BOM	Internal records	√	P	V	
1.4	Housing & enclosures	Visual defects, cutouts, drills, taps & painting	Major	Visual	100%	TG 60196	TG60196/BOM	Internal records	√	P	V	
2.0 INPROCESS INSPECTION												
2.1		Burn in test	Major	Electrical	100%	TG 60196	TG 60196 / Appd drawing	Test report		P	-	
2.2	Assembly of instruments	PCBs assemblies	Major	Visual	100%	TG 60196	TG 60196 / Appd drawing	Internal records		P	-	
2.3		Housing & enclosure assemblies	Major	Visual	100%	TG 60196	TG 60196 / Appd drawing	Internal records		P	-	
2.4		Internal layout, wiring, connections, and terminal marking	Major	Visual	100%	TG 60196	TG 60196 / Appd drawing	Internal records		P	-	
3.0 FINAL INSPECTION												
3.1	Type tests										Refer note	
3.2	Routine tests											


MANUFACTURER/SUBCONTRACTOR	LEGEND: D RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER IR: INSPECTION REPORT INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER	FOR CUSTOMER USE	APPROVED BY 	SACHIN JAIN 2021.07.13 16:22:18 +05'30'

MANUFACTURER'S NAME AND ADDRESS		STANDARD QUALITY PLAN					TO BE FILLED BY BHEL		TO BE FILLED BY BHEL					
BHEL	VENDOR'S NAME	ITEM	CONDUCTIVITY MEASURING EQUIPMENT		QP NO.	QA/BE/QP/317								
		DRG. NO.	AS PER PO		REV.	07								
		SPEC.	TG 60196											
		REV	AS PER PO		Page 2 of 2									
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS		
1	2	3	4	5	6	7	8	9	D	M	B	N	10	11

3.2.1		Visual & dimension	Major	Visual/measuremnt	100%	TG 60196	TG 60196 / Appd drawing	IR	√	P	W		
3.2.2		Insulation resistance	Major	Electrical	100%	TG 60196	TG 60196 / Appd drawing	Test report	√	P	W		
3.2.3		Burn in test	Major	Electrical	100%	TG 60196	TG 60196 / Appd drawing	Test report	√	P	V		
3.2.4		Functional/simulation test (Output signals, LED indicators & digital indications accuracy for FIVE input values in the operating range)	Major	Electrical	100%	TG 60196	TG 60196 / Appd drawing	Test report	√	P	W		
3.2.5		Compliance of technical requirements	Major	-	100%	TG 60196	TG 60196 / Appd drawing	COC	√	P	V		
3.2.6		Completeness & correctness of documents	Major	Physical	100%	TG 60196	TG 60196 / Appd drawing /SQP	Documents	√	P	V		
4.0	Packing & marking												
4.1		Identification & marking	Major	Physical	100%	TG 60196	TG 60196	Internal records	√	P	V		
4.2		Sturdiness of packing against transit damage	Major	Physical	100%	TG 60196	TG 60196	Internal records	√	P	-		

Note:

1. Type tests clearance from BHEL Engg to be verified (by inspection engineer) during inspection at vendor's works.
2. Manufacturer to maintain calibrated instruments having better accuracy than the item under test. Inspection engineer shall check the same.

		LEGEND: D RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER IR: INSPECTION REPORT INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER	FOR CUSTOMER USE	
MANUFACTURER/SUBCONTRACTOR			APPROVED BY	 SACHIN JAIN 2021.07.13 16:22:29 +05'30'

