PQR/EME/TG035/30

17.01.2023

Mandatory Pre-Qualification requirements for RTD for PW Header as per BHEL specification TG60752 (Material code-W96413509953)

Description:

The Duplex platinum resistance temperature detector for primary water header is used in generators for Measurement of temperature of water in water header. The RTD for PW Header should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such RTD for PW Header with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical and humid atmosphere
(ii)	Terminal Block	Ceramic terminal block fixed with the help of spring loaded screw
(iii)	Operating Temperature (Range)	0 C to 200 C
(iv)	Extension Pipe	X10CrNiTi189 or equivalent
(v)	Resistance element	Resistance value and tolerance class-A as per IS 2848. Duplex non- inductive wire wound platinum resistance element.
(vi)	IR Test	Should not be less than 100M ohms at room temperature
(vii)	Routine Test	As per IS:2848
(viii)	Type Test	As per IS:2848
(ix)	Terminal head	Plastic Form-B as per DIN 43729
(x)	Wires	Each of the two RTD elements shall consist of 2 PTFE insulated wires which shall terminate on the terminal block.
(xi)	Connection	Threaded connection for fitting into thermowell.

PQR/EME/TG035/30 **17.01.2023**

Mandatory Pre-Qualification requirements for RTD for PW Header as per BHEL specification TG60752 (Material code-W96413509953)

2.0 In support of above serial number-1, vendor shall furnish technical details RTD for PW Header in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	Type of RTD			

3.0 Vendor to furnish correlated test certificates against any one of the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from one of the end users of RTD for PW Header against any one of the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of RTD for PW Header. Vendor to furnish details of the manufacturing facilities available at their works.

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) High Voltage Test
3) Resistance Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60752.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

PQR/EME/TG035/24 **17.01.2023**

Mandatory Pre-Qualification requirements for RTD as per BHEL specification TG60751 (Material code-W96413509945)

Description:

The Duplex platinum resistance temperature detector is used in generators for Measurement of temperature of air, gas and oil. The RTD should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such RTD with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical ,dusty and humid atmosphere
(ii)	Terminal Block	Ceramic terminal block fixed with the help of spring loaded screw
(iii)	Operating Temperature (Range)	0 C to 200 C
(iv)	Protective Sheath and Extension pipe	SS316 or equivalent
(v)	Resistance element	Resistance value and tolerance class-A as per IS 2848. Duplex non- inductive wire wound platinum resistance element.
(vi)	IR Test	Should not be less than 100M ohms at room temperature
(vii)	Routine Test	As per IS:2848
(viii)	Type Test	As per IS:2848
(ix)	Terminal head	Die cast aluminum/light metal alloy with protection class-IP65
(x)	Wires	Each of the two RTD elements shall consist of 2 PTFE insulated wires which shall terminate on the terminal block.
(xi)	Connection	Threaded connection for fitting into thermowell.

PQR/EME/TG035/24

17.01.2023

Mandatory Pre-Qualification requirements for RTD as per BHEL specification TG60751 (Material code-W96413509945)

2.0 In support of above serial number-1, vendor shall furnish technical details RTD in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	Type of RTD			

3.0 Vendor to furnish correlated test certificates against the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from the end users of RTD against the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of RTD. Vendor to furnish details of the manufacturing facilities available at their works.

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) High Voltage Test
3) Resistance Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60751.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

PQR/EME/TG035/26 **17.01.2023**

Mandatory Pre-Qualification requirements for PRTD as per BHEL specification TG60734 (Material code- W96413508620)

Description:

The four-wire duplex flat platinum resistance temperature detector is used in generators for Measurement of temperature of stator winding bars. The PRTD should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such four-wire duplex flat platinum resistance temperature detector) with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical, humid and dusty atmosphere
(ii)	Minimum dimension	150X10X2 mm
(iii)	Operating Temperature (Range)	0 C to 200 C
(iv)	Leads	The leads shall be of 19/0.16mm stranded copper with poly- tetraflouroethylene Insulation (with min. radial thickness of 0.25mm).
(v)	Resistance element	Resistance value and tolerance class-A as per IS 2848. The wire wound resistance element shall be laid down in glass epoxy sheet in totally strain free manner. Empty space shall be filled with insulated powder.
(vi)	HV Test	2.5 kV AC for 3 Min
(vii)	IR Test	Should not be less than 100M ohms when measured with 100VDC meggar at 20C
(viii)	Routine Test	Resistance Accuracy and IR test
(ix)	Type Test	As per IS:2848
(x)	Pull Test	The leads shall be suitably brazed to the resistance element. Each lead shall withstand Pulling force of 5 kg when applied to each of the leads.
(xi)	Compression load	Construction shall be such that it can bear compression load greater than 1 metric ton without any damage.

PQR/EME/TG035/26 **17.01.2023**

Mandatory Pre-Qualification requirements for PRTD as per BHEL specification TG60734 (Material code- W96413508620)

2.0 In support of above serial number-1, vendor shall furnish technical details of four-wire duplex flat platinum resistance temperature detector in below mentioned format for at least one no. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	Flat PRTD Size- 150X10X2 Min			

3.0 Vendor to furnish correlated test certificates against any one of the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from one of the end users of four-wire duplex flat platinum resistance temperature detector against any one of the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of four-wire duplex flat platinum resistance temperature detector Vendor to furnish details of the manufacturing facilities available at their works.

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) High Voltage Test
3) Resistance Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60734.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

PQR/EME/TG035/25 **17.01.2023**

Mandatory Pre-Qualification requirements for P.T.Sensor for Header Nipple(RTD) as per BHEL specification TG60731 (Material code-W96413508612)

Description:

The P.T Sensor for Header Nipple(RTD) is used in generators for Measurement of temperature of water which is flowing in the stator winding bars. The P.T.Sensor for Header Nipple(RTD) should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such P.T.Sensor for Header Nipple(RTD) with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical, humid and dusty atmosphere
(ii)	Material of Square plate and enclosure for RTD Element	X6CrNiMoTi17122(1.4571)/SS321
(iii)	Operating Temperature (Range)	0 C to 150 C
(iv)	Leads	The leads shall be of 19/0.16mm stranded copper with poly- tetraflouroethylene Insulation (with min. radial thickness of 0.25mm).
(v)	Resistance element	Resistance value and tolerance as per IS 2848. The elements shall be wire wound type using insulated wire and suitably encapsulated in silicon alumina paste and epoxy resin
(vi)	HV Test	1.5 kV AC for 1 Min
(vii)	IR Test	Should not be less than 100M ohms when measured with 500VDC meggar at 20C
(viii)	Routine Test	Resistance Accuracy and IR test
(ix)	Type Test	As per IS:2848
(x)	Pull Test	The leads shall be suitably brazed to the resistance element. Each lead shall withstand Pulling force of 4 kg when applied to each of the leads.

PQR/EME/TG035/25 17.01.2023

Mandatory Pre-Qualification requirements for P.T.Sensor for Header Nipple(RTD) as per BHEL specification TG60731 (Material code-W96413508612)

2.0 In support of above serial number-1, vendor shall furnish technical details of P.T.Sensor for Header Nipple(RTD) in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	Type of RTD Size of RTD-4X4X30 mm Max.			

3.0 Vendor to furnish correlated test certificates against the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from the end users of P.T.Sensor for Header Nipple(RTD) against the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of P.T.Sensor for Header Nipple(RTD). Vendor to furnish details of the manufacturing facilities available at their works.

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) High Voltage Test
3) Resistance Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60731.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

PQR/EME/TG035/29 **17.01.2023**

Mandatory Pre-Qualification requirements for TRIPLEX NICKEL CHROME NICKEL DETECTOR as per BHEL specification TG60399 (Material code-W96413503211)

Description:

Triplex Ni/Cr-Ni Thermocouple (K type thermocouple), as per IS:7358, is used for bearing temperature monitoring. The Thermocouple should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such Triplex Ni/Cr-Ni Thermocouple with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical atmosphere
(ii)	Range and RH	0 to 150C and 95% maximum
(iii)	Thermo element	Nickel/ Chrome-Nickel, characteristics shall confirm to DIN IEC-584
(iv)	Accuracy	Class-a Type-K as per DIN IEC-584
(v)	Type Test	As per IS:7358

2.0 In support of above serial number-1, vendor shall furnish technical details of Triplex Ni/Cr-Ni Thermocouple in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	-Type of thermocouple -Lead size			

3.0 Vendor to furnish correlated test certificates against the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from the end users of Triplex Ni/Cr-Ni Thermocouple against the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of Triplex Ni/Cr-Ni Thermocouple. Vendor to furnish details of the manufacturing facilities available at their works.

PQR/EME/TG035/29 17.01.2023

Mandatory Pre-Qualification requirements for TRIPLEX NICKEL CHROME NICKEL DETECTOR as per BHEL specification TG60399 (Material code-W96413503211)

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60399.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

PQR/EME/TG035/28

17.01.2023

Mandatory Pre-Qualification requirements for 4-Wire Simplex RTD for Core as per BHEL specification TG60661 (Material code-W96413507055)

Description:

The 4-Wire Simplex RTD is used in generators for Measurement of core temperature. The 4-Wire Simplex RTD for Core should be of very reliable and proven design for temperature measurement.

1.0 The vendor should be a regular manufacturer of such 4-Wire Simplex RTD for Core with minimum following requirements –

Si No.	Parameter	Value
(i)	Suitable Environment	Tropical, humid and dusty atmosphere
(ii)	Material of Square plate and enclosure for RTD Element	X6CrNiMoTi17122(1.4571)/SS321
(iii)	Operating Temperature (Range)	0 C to 200 C
(iv)	Leads	The leads shall be of 19/0.16mm stranded copper with poly- tetraflouroethylene Insulation (with min. radial thickness of 0.25mm).
(v)	Resistance element	Resistance value and tolerance class-A as per IS 2848. The elements shall be wire wound type using insulated wire and suitably encapsulated in silicon alumina paste and epoxy resin
(vi)	HV Test	1.5 kV AC for 1 Min
(vii)	IR Test	Should not be less than 100M ohms when measured with 500VDC meggar at 20C
(viii)	Routine Test	Resistance Accuracy and IR test
(ix)	Type Test	As per IS:2848
(x)	Pull Test	The leads shall be suitably brazed to the resistance element. Each lead shall withstand Pulling force of 4 kg when applied to each of the leads.

Mandatory Pre-Qualification requirements for 4-Wire Simplex RTD for Core as per BHEL specification TG60661 (Material code-W96413507055)

2.0 In support of above serial number-1, vendor shall furnish technical details of 4-Wire Simplex RTD for Core in below mentioned format for at least one nos. (1) of the P.O. executed in past 10 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
1	Type of RTD Size of RTD-5.5X5.5X30 mm Max.			

3.0 Vendor to furnish correlated test certificates against the P.O. submitted as per clause 2.

4.0 Vendor to furnish acceptance certificate from the end users of 4-Wire Simplex RTD for Core against the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

5.0 The vendor should have in-house manufacturing facilities for manufacturing of 4-Wire Simplex RTD for Core. Vendor to furnish details of the manufacturing facilities available at their works.

6.0 The vendor should have facilities for carrying out the following tests and provide details of test equipment available at their works.

1) Insulation Resistance Test
2) High Voltage Test
3) Resistance Accuracy Test

7.0 The testing facilities available at vendor's works should be duly calibrated against measurement standards traceable to national/international measurement standards. Vendor to confirm the same. Alternatively, vendor to indicate their tie-up with accredited laboratory for performing Routine/Type tests or agree to carry out at NABL/ILAC/APLAC approved lab and provide the details for the same.

8.0 Vendor shall confirm to meet all the technical requirements of Specification TG60661.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, 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. <u>Use and Non-Disclosure</u>:

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. <u>Arbitration & Conciliation:</u>

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: -

For NPCIL projects vendor approval from NPCIL/ End customer is required. For unapproved vendors to provide desired Data & Credentials as per NPCIL format for NPCIL approval.
Vendors has to confirm for inspection by BHEL/ BHEL nominated Inspection agency **(M/s. TUV)** and NPCIL/End customer as per BHEL& NPCIL approved QP Vendors to submit endorsed copy of this QP. Vendors also confirm to follow inspection T&C as finally agreed in NPCIL/ End customer approved QP.

Item details are as follows –

1. **MATERIAL CODE- W90415302781**
   DUPLEX RTD 4-WIRE
   TEMPRATURE RANGE 0-200C
   AS PER SPECIFICATION TG60753
   QTY- 24 Nos.

2. **MATERIAL CODE- W96413503211**
   TRIPLEX NICKEL CHROME NICKEL
   DETECTOR, NI/CR-NI TC TD 200L18000(ANNEX-I)
   SPEC: TG60399 REV: 03
   QTY- 08 Nos.

3. **MATERIAL CODE- W96413507055**
   4 WIRE SIMPLEX RTD FOR CORE
   SPEC: TG60661 REV: 02
   QTY- 120 Nos.

4. **MATERIAL CODE- W96413508612**
   CLASS A - PT SENSORS(RTD) FOR
   HEADER NIPPLE
   SPEC: TG60731 REV: 01
   SIZE: TG60731
   QTY- 210 Nos.

5. **MATERIAL CODE- W96413508620**
   CLASS A- FOUR WIRE
   DUPLEX FLAT PLATINUM
   RESISTANCE TEMPERATURE
   DETECTOR AS PER SPEC TG60734
   SPEC: TG60734 REV: 01
   QTY- 88 Nos.

6. **MATERIAL CODE- W96413509945**
   DUPLEX PLATINUM RESISTANCE
   TEMPERATURE DETECTOR (4 WIRE)
   SPEC: TG60751 REV: 00
   SIZE: TG60751
   QTY- 24 Nos.

7. **MATERIAL CODE- W96414500224**
   DRG: 31450801003 REV: 03
   RESISTANCE THERMOMETER DUPLEX
   QTY- 10 Nos.

8. **MATERIAL CODE- W96413509953**
   DUPLEX PLATINUM RESISTANCE
   TEMPERATURE DETECTOR FOR
   PRIMARY WATER HEADER (4 WIRE)
   SPEC: TG60752 REV: 00
   SIZE: TG60752
   QTY- 06 Nos.

NUCLEAR POWER CORPORATION OF INDIA LTD.
(A Government of India Enterprise)
CHECKLIST & RECOMMENDATION FOR EVALUATION OF VENDORS

Tender No	:	
Item/Package	:	TG Island
Name of Main Contractor	:	BHEL, Haridwar
Address and contact details of Main Contractor	:	Heavy Electrical Equipment Plant, BHEL Ranipur, Haridwar, Uttarakhand-249403, Contact:- 01334-281363
Name of Sub-contractor/Vendor	:	
Business address of Sub-contractor	:	
Factory address of Sub-contractor	:	
Items for which approval is sought	:	

1.0 General:

1.1)	Key Personnel contacted	:	
	a) Senior Management	:	
	b) Quality Co-ordinator	:	
	c) Others (Production, Planning etc.)	:	

FOLLOWING ARE TO BE COMMENTED

1.2)	Recognition details if any code Stamps like U1, U2, ASME N, NPI or certification Like ISO 9001, 14000 etc. (Verify the records)	:	
1.3)	Floor space availability for present Activities/for future expansion	:	
	a) Indoor	:	
	b) Outdoor	:	

1.4)	Level of House keeping	:
1.5)	Whether NPC jobs executed earlier	:
	Whether BHEL jobs executed earlier for same item	:
	Whether BHEL jobs executed earlier for similar item	:
	Other than BHEL/NPC experience	:
1.6)	Delivery Performance (Schedule vs Actual) (Verify records)	:

2.0 <u>Technical</u>

2.1)	Quality Control	
	(a) Incoming Material Inspection	:
	(b) Process Inspection	:
	(c) Final Inspection	:
	(d) Manufacturing flow chart in detail along with outsourcing of items/operations	:
2.2)	Plant & Machinery	:
	(a) General condition & Age	:
	(b)Confirms to the details submitted in application	:
2.3)	Calibration facilities	:
2.4)	Calibration records	:
2.5)	NDE Qualification records	:
2.6)	Is there a system of selecting/ short listing Sub-vendors?	:
2.7)	Availability of Testing facilities (details to be submitted)	:

2.8)	Whether working of following are satisfactory?	
	(a) Production	:
	(b) Quality control	:
2.9)	Understanding of scope of work	:
2.9.1)	Understanding of technical requirement of Job	:
2.10)	Availability and understanding of related standards.	:
2.11)	Capacity of the Vendor to fabricate and inspect	:
2.12)	Understanding of special Examination/ Testing (like ultrasonic Examination/ Helium Leak testing, Optical alignment testing etc.)	:
2.13)	Availability of special facilities	:
2.14)	Facilities/Machineries/testing equipment available in the shop floor to meet technical requirement of the job	:
2.15)	Qualified and experience Manpower in the shop floor to execute the specified job	:

3.0 <u>Quality System :</u>

3.1)	If ISO certified, check the availability and accessibility of Quality system manual	:
3.2)	Validity of ISO certification	:
3.3)	Whether Quality Control plan and Procedures are prepared?	:
3.4)	Whether organisation chart is available?	:

3.5) What is the level of Quality Control in the organisation? :

3.6) Whether working of following are Satisfactory?

(a) Document control :

(b) Process Control :

(c) Non-conformances control :

3.7) Whether Internal Quality Audits are carried out? :

3.8) Whether non-conformities during Internal Audits are recorded and disposed off following laid down procedure? :

4.0 Financial Details (Previous three years) :

5.0 Assessment

5.1 Understanding and interpretation by vendor

Sl No	Area of Assessment	Observation	Remark
1	Scope of work		
2	Related standard		
3	Construction features		
4	Functional Requirement		

5.2 Capability of Vendor

Sl No	Area of Assessment	Observation	Remark
1	To design/develop		
2	To fabricate		
3	To inspect		
4	Specify remark on the capability of vendor to execute the job		

5.3 Comments if any w.r.t. delivery schedules: NA

5.4 Comments if any on quality of product: NA

6.0 Conclusion: Vendor is capable for meeting the requirement, hence acceptable to BHEL.

Signatures of BHEL evaluation Team Members

Sl No	Name (Mr.)	Designation	Signature & Date
1			
2			
3			

Sample Quality Assurance Plan For General Purpose Resistance Temperature Detectors

Sr. No.	Component Operation	Characteristic	Type Method of check	Classification	Quantum of check	Reference of Document	Acceptance Norms	Format of Record	Agency			Remarks
									(P)	(W)	(V)	
I.	**RTD (Incoming and In-process)**											
a.	Element	Continuity	Metering	MA	100%	Visual	No open Circuit	Report	3	-	2, 1	
b.	Brazing Of element with leads	Visual	Visual	MA	100%	Visual	Good Quality braze	Report	3	-	2, 1	
II.	**RTD Assembly (with Thermowell, if applicable)**											
a.	Dimensional check on RTD insert	Dimensions	Measurement	MA	100%	NPCIL approved Test procedure	NPCIL approved Drawing	Report	3	2, 1		CHP See note-1
b.	Calibration at 0°C	Resistance	calibration	MA	100%	IEC 60751	IEC 60751	Report	3	2, 1		
c.	Insulation resistance at ambient temp.	IR	meggaring	MA	100%	IEC 60751	Greater than 100MΩ at 100V DC	Report	3	2, 1		
d.	Insulation at elevated temperature	IR	meggaring	MA	Samples of each type & range	IEC 60751	IEC 60751	Report	3	2, 1		
e.	Response time	Time Contant	IEC 60751	MA	Sample from each type & range	IEC 60751	Less than 60 secs. with thermowell & less than 20 secs.	Report	3	2, 1		

Sample Quality Assurance Plan For General Purpose Resistance Temperature Detectors

Sr. No.	Component Operation	Characteristic	Type Method of check	Classification	Quantum of check	Reference of Document	Acceptance Norms	Format of Record	Agency (P)	Agency (W)	Agency (V)	Remarks
						procedure	without thermowell.					
f.	Calibration at higher points	100 °C, 200°C , 270 °C & 350 °C	calibration	MA	100%	IEC 60751	Class B IS-2848/IEC-60751	Report	3	2,1		CHP See note-1
g.	Self heating error, Drop test and Thermal cycling test	Error	IEC 60751	MA	Sample From each type & range	IEC 60751	IEC 60751	Report	3	2, 1		
h.	Vibration Test (Non-seismic & Seismic)	Endurance	vibration	MA	Sample From each type & range	NPCIL approved Test procedure	After the test all other test requirements mentioned in spec. shall be met.	Report	4/3	3,2	1	
III.	**THERMOWELL**											
a.	Raw material test thermowell	Chemical & Mechanical	Chemical and mechanical	MA	Sample from each lot	NPCIL approved Test procedure	Applicable ASTM code	Report	3 /4	2	1	CHP See note-1
b.	Flange	Chemical & Mechanical	Chemical and mechanical	MA	Sample from each lot	NPCIL approved Test procedure	Applicable ASTM code	Report	3 /4	2	1	CHP See note-1

Sample Quality Assurance Plan For General Purpose Resistance Temperature Detectors

Sr. No.	Component Operation	Characteristic	Type Method of check	Classification	Quantum of check	Reference of Document	Acceptance Norms	Format of Record	Agency (P)	Agency (W)	Agency (V)	Remarks
		Radiography on welds	Radiography	MA	100%	NPCIL approved Test procedure	NPCIL approved procedure	Report	3 /4	2	1	CHP See note-1
c.	Finished Thermowell	Hydro tests 10 mints.	Hydro	MA	100%	NPCIL approved Test procedure	No physical damage/distortion/ leakage	Report	3	2,1		
		Concentricity	Radiography	MA	10%	NPCIL approved Test procedure	As per specification	Report	3/4	2	1	
			Ultrasonic	MA	100%	NPCIL approved Test procedure	NPCIL approved procedure	Report	3	2	1	CHP See note-1
		Dimensions	Measure-ment	MA	100%	NPCIL approved drawings	NPCIL approved drawings	Report	3	2	1	CHP See note-1

MA - MAJOR MI – MINOR P – PERFORMANCE
P - PERFORMANCE W – WITNESS V – VERIFICATION
1 - PURCHASER 2 - PRIME SUPPLIER 3 - SUB-VENDOR 4- EXTERNAL LABORATORY

Note 1- Inspection on 100%basis is to be done by the supplier. However NPCIL QA will witness as per AQL-Level-1, Table-IIIA of IS-2500 part-1

ISS - INSTRUMENT SPECIFICATION SHEET
CHP – CUSTOMER HOLD POINT

Certificate

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, P-45021/2/2017-PP (BE-II) dt. 28.05.2018 and P-45021/2/2017-PP (BE-II) dt. 16.09.2020, we hereby certify that

we M/s _____(supplier name) are local supplier meeting the requirement of minimum local content (50%) as defined in above orders for the material against Enquiry No. _____ .

Details of location at which local value addition will be made is as follows:

_____

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Seal and Signature of Supplier

MANUFACTURER'S NAME AND ADDRESS		QUALITY PLAN				TO BE FILLED BY BHEL	TO BE FILLED BY BHEL
BHEL	VENDOR'S NAME	ITEM		QP NO.			
				REV			
		DRG. NO.	AS PER PO				
		SPEC.	AS PER PO				
		REV		Page 1 of 1			

SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS		AGENCY			REMARKS
										M	B	N	
1	2	3	4	5	6	7	8	9	D	10			11

		LEGEND: ! RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION. M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION	FOR CUSTOMER USE	
MANUFACTURER/SUBCONTRACTOR		ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER		APPROVED BY