



BHARATH HEAVY ELECTRICAL LIMITED  
RAMACHANDRAPURAM  
HYDRABAD-502032  
TELANGANA, INDIA

Phonos: 040-2318 4088  
Fax : 040-23020085  
E-MAIL : anilrbk@bhel.in

ENQUIRY

PURCHASE DEPARTMENT

SUPPLIER'S COPY	Enquiry No: <b>HPEP/CMM/Adani Paints/RC /2026-27</b>	Enq. Date 09.02.2026	No. of. Items As per Annexure I	DUE DATE OF QUOTATION 19.02.2026
-----------------	---------------------------------------------------------	-------------------------	------------------------------------	-------------------------------------

Enq. Sl.No	Specification	Material Code	Item Description	Unit	Quantity	Delivery Schedule
01	As per Annexure -I	As per Annexure -I	Procurement of paints <b>through</b> rate contract as per Annexure -I for BHEL Hyderabad	L	As per Annexure I	Rate contract for supply of paints for BHEL Hyderabad for a period of one year with a delivery period of 30 days from placement of individual POs against RC.

**Remarks: (Please read the description of the items carefully before quoting)**

We propose to enter into a Rate Contract for procurement of “of paints for BHEL Hyderabad”, for attached list of items in the annexure I as per specification. In this connection following documents are enclosed.

**This is a Two-Part Bid Enquiry.**

**Part -I (Techno- Commercial Bid)**

- 1) List of items (Annexure I)
- 2) Terms and Conditions of Enquiry —Annexure II
- 3) BHEL Specifications
- 4) ITB (Instructions to Bidders) along with Annexures
- 5) Special Conditions of Contracts (SCC)—Annexure F
- 6) BHEL RA Guidelines

**Part -II (Price Bid)**

- 1) Price Bid /BOQ template (To be filled and submitted only in Part -II Bid as price Bid)

**NOTE:**

- a) Evaluation is on Overall L1 basis.
- b) Bidders shall submit Part I documents (Techno-commercial) duly filled, signed & stamped along with the technical offer.
- c) Part II – Price Bid/BOQ.
- d) **Reverse Auction** is applicable for this Enquiry.
- e) All other terms are as per enclosed tender documents.

For and on-behalf of  
Bharat Heavy Electricals Limited

B Anil Kumar  
Manager / Purchase / CMM

**Annexure I**  
List of items in the enquiry.

Enquiry Number: HPEP/CMM/Lubes/RC /2026-28

RC Sl.no	Mat Code	Material Description	MU	Spec	Colour	Pur Gr	Requirement (Qty in Liters)	Long Description	Item Quoted (YES/NO)	Offered Product Name	As per Specification or not
1	AA5610005019	CH RST EPXY BSD ROXD ZINC PHSPT PRIMER	L	AA56105		N6A	280	CHEMICAL RESISTANT EPOXY BASED RED OXIDE ZINC PHOSPHATE PRIMER IN 20LTR DRUM.			
2	AA5610035600	H BUILD B COAL TAR EP PNT SHELF LIFE 12	L	AA56135		N6A	1,020	HIGH BUILD COALTAR BLACK EPOXY PAINT IN 20LTR PACK.			
3	AA5670008006	THINNER FOR EPOXIDE PRIMING & FINISHING	L	AA56708		N6A	1,800	THINNER FOR EPOXIDE PRIMING & FINISHING IN 20LTR DRUM.			
4	HY5610005736	ZINC RICH PLYMD EPXY PRMR,PNTDR ZINC8536	L	AA56114	GREY	N6A	3,000	EPOXY BASED ZINC RICH PRIMER PAINT (TWO PACK)IN 20LTR DRUM.			
5	HY5610005914	INORGANIC ZINC SILICATE PRIMER400 DEG.C	L	AA56113		N6A	2,220	INORGANIC ZINC SILICATE PRIMER 400 DEG.C IN 20LTR DRUM			
6	HY5610005922	HEAT RESISTANT AL.SILICON (RAL 9006)	L	AA56134	RAL 9006	N6A	2,700	HEAT RESISTANT ALUMINIUM SILICON PAINT - Gr.2(TEMPERATURE UPTO 400°C)IN 20LTR DRUM.			
7	HY5610006074	HIGH BUILD MIO EPOXY INTER- MEDIATE CO	L	AA56112		N6A	300	POLYAMID CURED EPOXY PAINT WITH MIO CONTENT(INTERMEDIATE)IN 20LTR DRUM.			
8	HY5610034620	HEAT RESIST SILCON AL TEMP.500-1200DEG.F	L	AA56149		N6A	1,360	HEAT RESISTANT SILICON ALUMINIUM TEMP.500-1200DEG.F IN 20LTR DRUM.			
9	HY5670062140	THINNER FOR INORGANIC ZINC SILICATE PRIMER	L	AA56708		N6A	940	THINNER FOR INORGANIC ZINC SILICATE PRIMER IN 20LTR DRUM.			
10	HY5670062159	THINNER FOR HIGH TEMP SILICON AL PAINT	L	AA56708		N6A	1,800	THINNER FOR HIGH TEMP SILICON AL PAINT IN 20LTR DRUM.			
11	HY9050001050	HEAT.RES.SILICONE ALUMINUM 600 DEG.C	L	HY9050001		N6A	480	HEAT RESISTANT SILICON ALUMINUM PAINT 600 DEG.C IN 20LTR DRUM.			
12	HY9050001068	ACRYLIC POLYURETHANE PAINT-PHIROZI BLUE	L	HY9050001		N6A	300	ACRYLIC POLYURETHANE PAINT PHIROZI BLUE IN 20LTR DRUM.			
13	HY9050001106	ACRYLIC POLYESTER POLYUR.PAINT-LIT.GREY	L	HY9050001		N6A	720	ACRYLIC POLYESTER POLYURETHANE PAINT LIGHT GREY IN 20LTR DRUM.			
14	HY9050001114	ACRYLIC POLYESTER POLYUR.PAINT-W.GREY	L	HY9050001	RAL 9002	N6A	5,760	HIGH BUILD GLOSS ALIPHATIC ACRYLIC POLYURETHENE PAINT IN 20 LTR DRUM.			
15	HY9050001181	TINNER-ACRYLIC POLYESTER POLYURETHANE P	L	HY9050001		N6A	3,120	THINNER FOR ACRYLIC POLYESTER POLYURETHANE PAINT IN 20LTR DRUM.			
16	HY9050001220	EPOXY-HIGH BUILD MIO	L	HY9050001		N6A	1,480	EPOXY HIGH BUILD MIO IN 20LTR DRUM.			
17	HY9050001238	THINNER FOR EPOXY-HIGH BUILD MIO	L	HY9050001		N6A	1,080	THINNER FOR EPOXY HIGH BUILD MIO IN 20LTR DRUM.			
18	HY9050001408	ACRYLIC PU POLYURETHANE F3 BLUE RAL 5012	L	HY9050001	RAL 5012	N6A	520	ACRYLIC PU POLYURETHANE F3 BLUE RAL 5012 IN 20LTR DRUM.			
							28,880				

**Note: Evaluation is on Overall L1 basis. Vendor should quote for all items else the offer will not be accepted.**

Items in the enquiry are as per attached Annexure I

Supply of material shall be as per BHEL specification.

**REMARKS:**

1. Shelf life shall be minimum 12 months from the date of supply to BHEL, R C PURAM, Hyderabad.
2. Vendors to submit product datasheets and MSDS along with offers.
3. Test certificates to be submitted during supply.
4. Evaluation is on overall L1 basis.
5. Transportation shall be in supplier scope.
6. Customer recommended list is applicable for the above items and Paints will be procured from the customer approved vendors (Adani) only.
7. Supply shall be made in 20 ltr MS Drum. Hardener or any other material whenever supplied with paint also should be supplied in MS Drums/Containers only..
8. Minimum order quantity of individual Purchase order issued under rate contract shall be 2000 ltr (Overall PO Qty in a single PO), however, there shall be no limitation on number and quantity of items in a PO.
9. Delivery period is 30 days from the date of placement of individual PO.

**Special Remarks:**

Customer approved list is applicable and any new Manufacturer other than Customer Approved Vendors will be referred to Adani for their approval before price bid opening. Offer acceptance is subjected to customer approval.

**Terms and Conditions of Contract ANNEXURE – II**

Sl	<b>Terms and conditions for Enquiry</b>	<b>Supplier Remark</b>
1	This Tender is for entering into a Rate Contract for a period of one Year. The Rate Contract (RC) will be operated by BHEL HPEP Hyderabad Unit.	
2	<p>Customer recommended list is applicable for the above items and Paints will be procured from the customer approved vendors (Adani)only. Any new Manufacturer other than Customer Approved Vendors will be referred to Adani for their approval before price bid opening. Offer acceptance is subjected to customer approval.</p> <p>Items shall be supplied as per BHEL attached Specification only. Vendor to confirm in technical offer.</p>	
3	<p>The period of this Rate Contract shall be 12(twelve) months from the date of award.</p> <p>The Contract may be extended for a period upto twelve months (12) on same Terms and Conditions of the Contract. BHEL reserves the right to foreclose the Contract before completion of extended time period.</p> <p>Separate individual Purchase Orders shall be placed as per the material requirement by BHEL. Supplier to supply the material against PO only.</p>	
4	Supplier should submit test certificates for supply made as per applicable IS standard for all parameters for the offered product.	
5	The Supplier must provide the Material Safety Data Sheet (MSDS) of their offered product at the time of supply.	
6	<p>The purchaser or its authorized representative shall have the right to inspect or to test the paints to confirm their conformity with the contract and in case any inspected / tested paints fail to perform to the stipulated specifications, the purchaser may reject them and the supplier shall either replace the rejected material, make all alterations necessary arrangements as per the specifications at free of cost to the purchaser. The items can be inspected at final destination. However, Manufacturer's Standard Test Certificates along with the Guarantee Certificate, indicating the conformation to the specification of the order should be submitted to the concerned consignee in advance.</p>	
7	Supply shall be made in 20 ltr <b>MS Drum</b> . Hardener or any other material whenever supplied with paint also should be supplied in MS Drums/Containers only.	
8	The enquiry quantity shown in the annexure- I are tentative	
9	<p><b>Minimum Ordered Qty of individual Purchase Order:</b></p> <p>a) Minimum order quantity of individual Purchase order issued under rate contract shall be <b>2000 ltr (Overall PO Qty in a single PO)</b>, however, there shall be no limitation on number and quantity of items in a PO.</p>	

10	Supplier shall provide technical services assistance to BHEL units where ever required with respect to training, application & usage of paints and other service reports from time to time.	
11	<p><b><u>Quality of Supplies &amp; Inspection:</u></b></p> <p>Supplier is responsible to supply the materials with high degree of quality in accordance with the product data sheets and as per the latest codes of practice. The supplier shall submit material test certificates, material safety data sheets, technical data sheets against each order along with the supply of materials. BHEL may carry out Inspection by itself or its authorized inspection agency prior to shipment.</p> <p>If the quality of materials supplied by the supplier fails below the expected standards, then the material shall be rejected and shall be replaced at no additional cost to BHEL. Rejected material to be taken back by vendor at their own cost within one month.</p>	
12	<p><b><u>Packing of materials:</u></b></p> <p>Paint shall be supplied in manufacturers original containers with the material code &amp; description, specification no., PO number with date, shade code/color, batch no, date of manufacture, expiry date. The data sheet, Material Test certificate/Certificate of compliance and MSDS shall be supplied for each lot, and to be kept in secure custody.</p>	
13	<p><b><u>FREIGHT &amp; INSURANCE:</u></b></p> <p>Transport and transit insurance shall be in the Supplier's scope on door delivery basis to BHEL stores. However, unloading of material in BHEL premises shall be BHEL responsibility.</p>	
14	<b><u>Payment Terms:</u></b> As mentioned in document HY: MM: ITB: Rev 18	
15	<b><u>Penalty:</u></b> As mentioned in document HY: MM: ITB: Rev 18 and SCC (Annexure F)	
16	<p><b><u>Delivery:</u></b></p> <p><b>F.O.R. Destination basis</b> up to BHEL Stores HPEP Hyderabad. Delivery period is 30 days from the date of placement of individual PO.</p>	
17	<p><b><u>Shelf Life :</u></b></p> <p><b>Shelf life shall be 12 months</b> from the date of supply to BHEL, R C Puram, Hyderabad-32.</p>	
18	Whenever required by BHEL, Supplier has to re-validate the usability of their supplied material after expiry in BHEL stores and shall issue revised shelf life certificates for respective batches of the usable materials within a specified time frame.	
19	<b>The RAL shade card</b> for all the paints should be communicated during technical evaluation stage	
20	Supplier should comply with all statutory requirements pertaining to environmental standards for the Manufacturing, Packing, Supply and Transportation of Paints	

21	If during the tenure of the contract any technical problems are noted or otherwise there is delay in supplies, BHEL reserves the right to put on " Hold" on further supplies and take supplies from the other Supplier under risk purchase clause (In case of default /Late delivery, Purchaser (BHEL) Reserves the right to make alternative arrangement of procuring material at supplier's Risk and Cost).	
22	<b>Compliance to document HY: MM: ITB: Rev 18.</b> Supplier shall submit ITB Rev:18, specification and SCC duly filled and signed and stamped	
23	<b>Reverse Auction:</b> Reverse Auction is applicable. Reverse Auction (RA) will be conducted as per BHEL RA Guidelines and evaluation will be done on overall L1 Basis.	
24	Bidder shall submit the following documents along with their bid  a. Copy of PAN Card. b. Copy of GSTIN. c. Copy of Cancelled Cheque. d. Copy of EFT Mandate duly certified by Bank.	
25	<b>Validity of Contract:</b>  Rates should be valid for a period of ONE YEAR from the date of entering into Rate Contract. Rates quoted are on firm price basis and Price Variation Clause within this period will not be entertained. However, statutory levies and duties shall be applicable as per Government notifications time to time.  Quantity increase, if any, shall be permitted on pro-rata basis for the extended period with the same rates as per rate contract.	
26	<b>Termination of Contract:</b>  BHEL reserves right to terminate the contract at any time or stage during the contract period by giving 15 days' notice with or without assigning any reasons without any financial consideration/implication.	
27	<b>MII Purchase Preference:</b> Yes (Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)	
28	<b>MSE Purchase Preference:</b> Yes	
29	All other terms and conditions are as per HY:MM:ITB: Rev 18	



## CORPORATE PURCHASE SPECIFICATION

AA 561 05

Rev. No. 07

PREFACE SHEET

### CHEMICAL RESISTANT EPOXIDE RED OXIDE ZINC PHOSPHATE PRIMING PAINT

FOR INTERNAL USE ONLY  
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

#### Comparable Standards:

1. INDIAN : IS: 14506 - 1998

#### Suggested/Probable Suppliers and Grades.

1. Refer plant vendors list.

#### User Plants /References:

1. HEEP, HARDWAR :  
2. HPBP, TRICHY

Revisions : CI 33.7 a) of MOM of MRC-CPO			APPROVED : INTERPLANT MATERIAL RATIONALISATION COMMITTEE-MRC (CPO)		
Rev. No. 07	Amd.No.	Reaffirmed	Prepared	Issued	Dt. of 1st Issue
Dt:01.02.2005	Dt :	Year :	TIRUCHY	Corp. R&D	JUNE, 1980



## CORPORATE PURCHASE SPECIFICATION

AA 561 05

Rev. No. 07

PAGE 1 OF 4

### CHEMICAL RESISTANT EPOXIDE RED OXIDE ZINC PHOSPHATE PRIMING PAINT

#### 1.0 GENERAL:

This specification deals with the quality requirements of two pack Chemical resistant Epoxy Based Priming Paint pigmented with Red Oxide Zinc Phosphate.

#### 2.0 APPLICATION:

The paint shall be used as a primer in the painting system for protection of steel work, both under marine and inland outdoor conditions.

#### 3.0 COMPLIANCE WITH NATIONAL STANDARDS:

The material shall comply, in general, with the following national standards and also meet the requirements of this specification.

i) IS: 14506 - 1998 : Epoxy red oxide zinc phosphate weldable primer, two component.

#### 4.0 COMPOSITION:

The paint consists of two components i.e. base and accelerator. The base contains epoxy binder suitably pigmented with red oxide and zinc phosphate and extenders. The accelerator is polyamide and solvent to cure the base of the paint system.

#### 5.0 MIXING RATIO:

The components of paint are to be mixed as recommended in the product data sheet supplied by the manufacturer of the paint: The type and content of the binding material as determined by infra-red spectroscopy or thin layer chromatography shall be strictly adhered to the "Type approved sample".

#### 6.0 COLOUR:

Red oxide.

#### 7.0 FINISH:

Smooth and matt.

#### 8.0 FREEDOM FROM DEFECTS:

The base of the paint system shall remain free from defects like hard setting of pigments, skinning and livering when kept in closed container till its shelf life.

#### 9.0 SAMPLING:

As per IS:101.

#### 10.0 TECHNICAL REQUIREMENTS:

Unless otherwise specified, the sample (mixed paint) shall be tested in accordance with IS 101.

Revisions : <b>CI 33.7 a) of MOM of MRC-CPO</b>			<b>APPROVED :</b> <b>INTERPLANT MATERIAL</b> <b>RATIONALISATION COMMITTEE-MRC (CPO)</b>		
Rev. No. 07	Amd.No.	Reaffirmed	Prepared TIRUCHY	Issued Corp. R&D	Dt. of 1st Issue JUNE, 1980
Dt:01.02.2005	Dt :	Year :			





**10.1 Mass per 10 litres** : 12.0 kg, minimum

**10.2 Consistency:**  
Paint shall be mixed so that it produces a smooth and uniform paint suitable for application.  
40 - 60 secs by FC No.4 at  $27 \pm 2^{\circ}\text{C}$ .

**10.3 Drying time** :

- a) **Soft dry** : 4 hours, maximum.
- b) **Hard dry** : 16 hours, maximum

**10.4 Volatile matter, percent by mass** : 30.0 maximum.

**10.5 Pigment content, percent by mass**: 40.0 minimum.

**10.6 Volume solids, percent** : 35.0, minimum.

**10.7 Dry film thickness per coat** : 25.0 microns, minimum.

**10.8 Flash point** :  $20^{\circ}\text{C}$ , minimum..

**10.9 Pot life at ambient temperature (Annexure-A)**: 4.0 hours, minimum.

**10.10 Zinc phosphate, percent by mass on pigment (Annexure-B):**  
16 percent by mass, minimum.

**10.11 Scratch Hardness ( IS: 101, Part 5/Sec. 1):**  
After the film is cured for 7 days and tested under of 2000gm, no such scratch as to show the bare metal shall be produced.

**10.12 Flexibility and Adhesion ( IS:101, Part 5 /Sec. 2):**  
The film shall not show sign of damage detachment or cracking when tested after 4 days of curing.

**10.13 Type Test:**  
**Salt spray test for 300 hours ( IS:101, Part 6 /Sec. 1):**  
The test panel prepared from this material shall show no signs of corrosion after continuous exposure for 300 hours in salt spray cabinet.

**11.0 TYPE APPROVAL:**  
**Samples:**  
Samples for type approval testing shall be accepted only from those manufacturers whose manufacturing and testing facilities are considered satisfactory to ensure continuous supply of good product.



## CORPORATE PURCHASE SPECIFICATION

AA 561 05

Rev. No. 07

PAGE 3 OF 4

### 12.0 TEST CERTIFICATES

Unless otherwise stated, three copies of test certificates shall be supplied along with each consignment giving following information:

In addition, the supplier shall ensure to send one copy of test certificate along with the dispatch documents to facilitate quick clearance of the materials.

BHEL order

AA 561 05, Rev 07: Chemical resistant epoxide red oxide zinc phosphate priming paint

Manufacturers/suppliers Name:

Trade name/mark, if any:

Batch/Lot No.:

Quantity supplied:

Date manufacture & expiry:

Test results of clause 10.0

Mixing ratio

### 13.0 KEEPING PROPERTY

When stored in covered dry place in the original sealed containers under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture which shall be subsequent to the date of placement of BHEL order.

### 14.0 PACKING AND MARKING

Unless otherwise stated, base and hardener shall be packed separately in steel containers of approximate capacities. Each container shall bear the following information:

AA 561 05 : Chemical resistant epoxide red oxide zinc phosphate priming paint

BHEL Order No.

Manufacturers/ Supplier's name:

Trade name / mark , if any:

Batch/Lot No.:

Name of components:

Mixing ratio:

Quantity supplied:

Date of manufacture & expiry:

### 15.0 REFERRED STANDARDS (Latest Publications Including Amendments):

- 1) IS:101
- 2) IS: 14506

#### ANNEXURE - A (CI 10.9)

#### PROCEDURE FOR TESTING OF POT LIFE:

If the mixed paint, as recommended by the supplier, could be still thinned, the end of the working life (pot life) has not been reached. The end of the working life is reached when the test material (paint) gels, becomes stringy or can not be thinned for application. The time interval between the mixing time and time of gelling shall be reported as pot life of the mixed paint.



### ANNEXURE - B (CI 10.10)

#### PROCEDURE FOR TESTING OF ZINC PHOSPHATE CONTENT:

##### **I. General:**

The pigment is extracted from the paint and pigment is taken for the determination of Zinc phosphate content.

##### **II. Reagents required:**

###### **a) Quinoline solution:**

50ml of quinoline is dissolved in 60ml of hydrochloric acid and 30ml of water with constant stirring. The solution is cooled and filtered. This is diluted to 1000ml and stored in a polythene bottle.

###### **b) Citric molybdic acid reagent:**

54gm of pure molybdic acid and 12gm of sodium hydroxide are dissolved in 400ml of hot water. 60gm of citric acid and 140ml of hydrochloric acid are added to 200ml of water. Now molybdic acid solution is added with citric acid solution and is made up to 1000ml. (The solution may be green or blue colour on its exposure to light). If necessary 0.5 percent potassium bromate solution is added until the green colour becomes pale. This solution is kept in a polyethylene bottle and stored in a dark place.

##### **III. Procedure:**

1.0gm of the sample is weighed into a 250ml beaker and 30ml of 1: 1 nitric acid and 5ml of 1 : 1 hydrochloric acid is added. The content is boiled well and filtered and made up to 200ml.

50ml of aliquot is pipetted out into a 500ml conical flask and this is diluted to 100ml. 30ml of citric molybdic acid solution is added and boiled gently. 10ml of quinoline solution is added from burette with continuous swirling. (Add 3 to 4 ml drop wise and balance in steady stream).

The precipitate is filtered into a weighed Gooch crucible provided with glass fibre or filter paper previously dried at 250°C. The precipitate is washed with water and dried at 250°C. The dried precipitate (quinoline phosphomolybdate) is weighed and calculated for its weight by difference.

A blank determination is carried out in the same way as the determination but omitting the test solution.

##### **Calculation:**

$$\% \text{ Zinc phosphate, by mass} = \frac{(M 1 - M 0) \times 0.3816}{\text{Mass of sample in gm.}} \times 100$$

Where

M 1 = mass of precipitate in gm obtained in sample.

M 0 = mass of precipitate in gm obtained in blank.



## CORPORATE PURCHASING SPECIFICATION

AA56112

Rev No.02

PREFACE SHEET

### HIGH BUILD INTERMEDIATE EPOXY PAINT

FOR INTERNAL USE ONLY  
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

**Equivalent/Comparable Standards:**

**User Plants and Replaced Plant Specifications/References:**

- 1) HEEP, HARDWAR : HW56179
- 2) HPBP, Trichy :

**Revisions:**

As per clause 44.4.a) of MOM of MRC-CPO+NM

**APPROVED:**

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.02

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-06-2001

Dt:01-09-2009

Dt:

Year:2015

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

**This page intentionally left blank**



## CORPORATE PURCHASING SPECIFICATION

AA56112

Rev No. 02

PAGE 1 of 3

### HIGH BUILD INTERMEDIATE EPOXY PAINT

#### 1 GENERAL

This specification governs the quality requirements of cold cured two pack high build intermediate epoxy paint suitable for application by brushing or spraying.

#### 2 APPLICATION

This material shall be used as an intermediate coat on epoxy primed surfaces to provide high build up coating thickness so as to protect the steel and other equipment's against corrosion due to humidity, saline environment and corrosive atmosphere.

#### 3 COMPLIANCE WITH NATIONAL STANDARDS

There is no national standard covering this material.

#### 4 COLOUR

Dark brown

#### 5 FINISH

Smooth and matt.

#### 6 FREEDOM FROM DEFECTS

The components of the paint shall remain free from defects like hard settling of pigments, skinning when kept in closed container and livering (excessive viscosity build up) during its rated shelf life.

The dried surface shall be free from defects like bittiness, floating of pigments, wrinkles, orange peel, blisters, hard particles, pin holes etc.,

#### 7 CHEMICAL COMPOSITION

The material shall be based on two components epoxy system and supplied as catalysed epoxy resin pigmented with MIO & TiO<sub>2</sub> and polyamide as an accelerator or hardener for cold curing. The mixing ratio of base and accelerator shall be as per supplier's recommendations. The type and content of the binding material i.e., epoxy resin, as determined by infrared spectrography or thin layer chromatography shall be strictly same as that of "Type Approved Sample".

The supplier should provide IR-Spectrograph in support of above composition.

The supplier of the material has to certify that the paint supplied is free from natural resins and free from lead or its compound to meet requirements of ISO 14001.

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

#### Revisions:

As per clause 44.4.a) of MOM of MRC-CPO+NM

#### APPROVED:

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.02

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-06-2001

Dt:01-09-2009

Dt:

Year:2015

## **8 TEST SAMPLE:**

Tender sample will not be required when once the type approval is given and the supplier concerned has to declare that the material for which the tender is given is of the same quality as the type approved sample.

Representative sample of the material shall be drawn and tested as per IS 101

## **9 PROPERTIES**

Unless otherwise specified, when tested in accordance with relevant parts of IS 101, the test samples shall show the following properties:

### **9.1 Consistency**

Smooth and homogenous.

### **9.2 Drying Time**

Touch dry : 6 hours, max.

Hard dry : 12 hours, max.

### **9.3 Mass per ten litres**

12.5-13.5 kgs.

### **9.4 Non-volatile matter**

48 - 52% by weight.

### **9.5 Volume Solids**

55%, min.

### **9.6 Resistance to salt spray**

The panels prepared from the material shall show no sign of corrosion after continuous exposure to salt spray for a period of 7 days in the salt spray cabinet.

### **9.7 Flexibility & Adhesion**

The film shall show no sign of damage, detachment or cracking when tested after 7 days curing at RT or 2 hours drying at 70 - 80°C after 24 hours air drying.

### **9.8 Scratch Hardness**

The film shall show no sign of scratch so as to show the bare metal at a load of 1000 grams when tested after 7 days curing at RT or 2 hours drying at 70 - 80°C after 24 hours air drying.

### **9.9 Flash Point**

Not below 25°C.

### **9.10 Dry film thickness**

75-100 microns per coat as per BHEL standard AA0674105.

### **9.11 Pot life**

4-6 hours, when mixed.



## CORPORATE PURCHASING SPECIFICATION

AA56112

Rev No. 02

PAGE 3 of 3

### 10 TEST CERTIFICATE

Unless otherwise stated, three copies of test certificates shall be supplied along with each consignments, giving the following information.

In addition, the supplier shall ensure to send one copy of the test certificates along with the despatch documents to facilitate quick clearance of the material.

AA56112, Rev 02:HIGH BUILD INTERMEDIATE EPOXY PAINT

BHEL Order No.

Manufacturers/ Supplier's name

Trade name / mark, if any

Batch/Lot No.

Date of manufacture and expiry

Test results of clause 7 to 9

T.C. No & date

Mixing ratio

### 11 KEEPING PROPERTY

When stored in covered dry place in the original sealed containers under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of six months after the date of manufacture which shall be subsequent to the date of placement of BHEL order.

### 12 PACKING AND MARKING

Unless otherwise stated, base & hardener shall be packed separately in steel containers of 4 litres capacity.

Each container shall bear the following information:

AA56112: HIGH BUILD INTERMEDIATE EPOXY PAINT

BHEL Order No.

Manufacturers/ Supplier's name:

Trade name / mark, if any:

Batch/Lot No.:

Name of components:

Mixing ratio:

Quantity supplied:

Date of manufacture & expiry:

### 13 ENVIRONMENTAL REQUIREMENTS

The supplier shall furnish Material Safety Data Sheet (MSDS) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal along with each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable.

### 14 REFERRED STANDARDS (Latest Publications Including Amendments)

- 1) IS 101
- 2) AA0674105



## CORPORATE PURCHASE SPECIFICATION

AA 561 13

Rev. No. 02

PREFACE SHEET

### INORGANIC ETHYL ZINC SILICATE PRIMER

**FOR INTERNAL USE ONLY  
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS**

#### Comparable Standards:

1. INDIAN

: IS 14946-2001, Main coat

#### Suggested/Probable Suppliers and Grades:

1. CDC Carbolin
2. Asian paints
3. Goddlass Nerolac Paints
4. Sigma coatings

#### User Plants /References:

1. HARDWAR : HW 56175
2. BHOPAL
3. TRICHY
4. HYDERABAD

**Revisions :**  
As per 40<sup>th</sup> MOM of MRC-CPO

**APPROVED :**  
**INTERPLANT MATERIAL**  
**RATIONALISATION COMMITTEE-MRC (CPO)**

Rev. No. 02	Amd.No.	Reaffirmed
Dt: 26.05.2012	Dt :	Year :

Prepared HARDWAR	Issued Corp. R&D	Dt. of 1st Issue JUNE, 2001
---------------------	---------------------	--------------------------------



## CORPORATE PURCHASE SPECIFICATION

AA 561 13

Rev. No. 02

PAGE 1 OF 4

### INORGANIC ETHYL ZINC SILICATE PRIMER

#### 1.0 GENERAL

This specification prescribes the quality requirements and application procedure for two components, air drying, Inorganic Zinc Ethyl Silicate priming paint. This priming paint when applied on steel structures provides excellent resistance to temperature, soil chemicals, salts, water, and chemical resistance under marine conditions and outside weather ability.

#### 2.0 APPLICATION

The material shall be intended for use as a primer coat in the painting system on new steel structures internally and externally. Normally, for best performance, the surface to be coated shall be ensured free from oil, loose rust/dust etc., followed by blast cleaning to Sa 2 1/2 min. with a surface profile of 35 to 50 microns. This shall be followed by application of single coat of the priming paint by spray method so as to achieve dry film thickness  $t$  of 65-75 microns. The surface profile after blasting shall be 20 –35 microns.

#### 3.0 COMPLIANCE WITH NATIONAL STANDARDS

The material shall comply with the requirements of following Indian standard and also, meet other requirements of this specification.

IS: 14946-2001, Main coat: Zinc Ethyl Silicate Primer, Two Components

#### 4.0 COLOUR

The colour of the material shall be Grey.

#### 5.0 FINISH

Smooth and Matt.

#### 6.0 COMPOSITION

The material shall be two components moisture and self cured Inorganic Ethyl Silicate Binder pigmented with zinc metal powder conforming to IS: 14355 and having a purity of 99% and particle size of 4-5 microns, in the recommended proportion. The coating of this material attains water resistance within 30 minutes of application and remains unaffected by rains, condensation or dew etc. The manufacturer shall specify the principal type of binder used.

The supplier of the material shall declare that components of paint supplied shall meet the legislative requirements ISO: 14001.

Revisions: As per 40 <sup>th</sup> MOM of MRC-CPO			APPROVED: INTERPLANT MATERIAL RATIONALISATION COMMITTEE-MRC (CPO)		
Rev. No. 02 Dt:26.05.2012	Amd.No. Dt :	Reaffirmed Year:	Prepared HARDWAR	Issued Corp. R&D	Dt. of 1st Issue JUNE, 2001



#### 7.0 MIXING RATIO:

The components of paints are to be mixed in the proportion as recommended by supplier of the material.

#### 8.0 TEST METHODS:

Unless specified otherwise, tests shall be conducted as prescribed in relevant parts and section of Indian standard IS: 101 and IS: 14946. The test panels shall preferably be prepared on blast cleaned surface.

#### 9.0 PROPERTIES:

The material shall meet the following technical requirements:

##### 9.1 DRYING TIME:

Surface dry	: 15 minutes, max.
Hard dry	: 2 hrs., min.
Time to topcoat	: 24 hrs., min.

##### 9.2 CONSISTENCY:

The liquid component mixed with powder shall be suitable for application by spray as such or when thinned in the proportions at specified by the manufacturer.

##### 9.3 FLASH POINT:

Not below 15° C

##### 9.4 MASS PER TEN LITRES:

20 kgs., min.

##### 9.5 VOLUME SOLIDS:

60.0 % , min.

##### 9.6 POT LIFE OF MIX (ANNEXURE D OF IS: 14946):

4 hrs., min. at 30° C

##### 9.7 DRY FILM THICKNESS:

65-75 microns per cot when measured after 72 hrs. of curing.

##### 9.8 RESISTANCE TO SALT SPRAY TEST (TYPE TEST):

The material shall pass resistance to salt spray test, when test panels cured for 72 hrs. are subjected to continuous exposure for 2000 hrs.

##### 9.9 PROTECTION AGAINST CORROSION UNDER CONDITIONS OF CONDENSATION (TYPE TEST):

The material shall pass the test, when test panels cured for 72 hrs., are subjected to exposure at specified conditions for 2000 hrs.

##### 9.10 HEAT RESISTANCE TEST:

The film shall not show signs of cracking, blistering or flaking when coated test panels air dried for 48 hrs., are kept at  $400 \pm 10^{\circ}\text{C}$  for 6 hrs followed by plunging in cold water-three cycles, min.

**9.11 COMPOSITION:****9.11.1 SOLID CONTENT:**

68%, min. by weight of mixed paint.

**9.11.2 TOTAL METALLIC ZINC CONTENT (ANNEXURE B OF IS : 14946):**

75%, min. by weight in non-volatile portion of the paint.

**9.12 MUD-CRACKING TEST:**

The coating applied to dry film thickness of 120 microns minimum, shall not show any mud cracking when viewed under 10 X magnification.

**9.13 SEDIMENTATION TEST:**

There shall not be any segregation of zinc powder form the base material within 2 hrs in the mixed paint.

**9.14 CURE TEST:**

The coated test panels air dried for 48 hrs shall pass the cure test when tested according to test procedure given in ASTM D 4752.

**10.0 KEEPING PROPERTY**

When stored in covered dry place in the original sealed containers under normal ambient conditions, the liquid portion shall not show thickening, curdling, gelling or hard caking and also retain the properties of mixed paint prescribed in this specification for a period of six months from date of delivery.

**11.0 TEST CERTIFICATES**

Unless otherwise stated, three copies of test certificates and product data sheet shall be supplied along with each consignment giving following information:

In addition, the supplier shall ensure to send one copy of test certificate along with the dispatch documents to facilitate quick clearance of the materials.

AA 561 13, Rev 02: Inorganic ethyl zinc silicate primer  
BHEL order No. & Date

Manufacturers/suppliers Name:

Trade name/mark, if any:

Batch/Lot No.:

Quality supplied:

Date manufacture & expiry:

Test results as per 9.0

Mixing ratio

Technical information, if any:



## 12.0 PACKING AND MARKING:

Unless otherwise stated, the components of paint shall be supplied separately in moisture and leak proof containers in packing size as specified in the BHEL order.

Each container of the consignment shall bear the following information printed or pasted at suitable place so as to protect it from damage during transportation and handling.

AA 561 13: Inorganic ethyl zinc silicate primer.

BHEL order No. & Date

Manufacturers/ Supplier's name:

Trade name / mark , if any:

Batch/Lot No.:

Name of contents:

Mixing ratio:

Quantity in container:

Date of manufacture & expiry:

Technical information, If any:

## 13.0 ENVIRONMENTAL REQUIREMENTS:

The supplier shall furnish Material Safety Data Sheet (**MSDS**) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal alongwith each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable.

## 14.0 PRECAUTIONS

- a) Use off the mixed paints within stipulated pot life i.e., 4 hrs after mixing and should be continuously agitated during application.
- b) Inorganic Zinc silicate primer should not be applied at relative humidity below 50 % and the surface should remain free from condensation at the time of application.
- c) After completion of the work, the application equipment must be cleaned thoroughly immediately with thinner and kept safely for next use.
- d) The surface to be painted must be blast cleaned to Sa 2 ½, min. and the painting shall be done by spray method uniformly. However, brush may be used for touch up of local areas only.

## 15.0 REFERRED STANDARDS (Latest Publications Including Amendments)

1) IS: 101	2) IS: 14355	3) IS: 14946
3) AA 067 41 01	5) ASTM D 4752	



# CORPORATE PURCHASING SPECIFICATIONS

AA56114

Rev. No.03

PREFACE SHEET

## EPOXY BASED ZINC RICH PRIMER PAINT (TWO PACK)

FOR INTERNAL USE ONLY

REMOVE THIS PREFACE SHEET BEFORE ISSUE TO SUPPLIERS

### Equivalent / Comparable Standards:

1. INDIAN . IS:14589 – 1999 (RA-2004), Grade 2

### Suggested/ Probable Suppliers and Grades:

1. Refer plant vendors list

### User plants & Replaced Plant Specifications / References:

1. HPBP, Trichy :
2. HEEP, Haridwar :

**Revisions:**  
As per 40<sup>th</sup> MOM of MRC-CPO

**APPROVED:**  
INTER PLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO)

Rev. No.03	Amd. No.	Reaffirmed	Prepared HPBP, Trichy	Issued Corp. R&D	Dt. of 1 <sup>st</sup> Issue Dec 2001
Dt:26-05-2012	Dt:	Year:			

**This page intentionally left blank**



# CORPORATE PURCHASING SPECIFICATIONS

AA56114

Rev. No.03

PAGE 1 of 5

## EPOXY BASED ZINC RICH PRIMER PAINT (TWO PACK)

### 1.0 GENERAL:

This specification deals with the quality requirements and test for Epoxy Based Zinc Rich Primer Paint suitable for corrosion protection.

### 2.0 APPLICATION:

The paint shall be used as a primer coat on abrasive blast cleaned steel structures internally and externally, in conjunction with epoxy base paints on fabricated structures and components.

### 3.0 COMPLIANCE WITH NATIONAL STANDARD:

The material shall comply with the following national standard and also meet the requirements of this specification.

IS: 14589 – 1999(RA-2004) Grade 2 : Zinc priming paint, epoxy based, two-pack specification.

### 4.0 COMPOSITION:

The paint consists of two components a base and a hardener. The base contains epoxy binder pigmented with zinc dust and suitable extenders. The hardener contains polyamide and solvents to cure the base of paint system.

### 5.0 MIXING RATION:

The components of paint are to be mixed as recommended in the product data sheet supplied by the manufacturer of the paint.

### 6.0 COLOUR: Grey

### 7.0 FINISH: Smooth and matt.

### 8.0 FREEDOM FROM DEFECTS:

The base of the paint system shall remain free from defects like hard setting of pigments, skinning and livering when kept in closed container till its shelf life.

### 9.0 SAMPLING: As per IS: 101

### 10.0 TECHNICAL REQUIREMENTS:

Unless otherwise specified, the sample (mixed paint) shall be tested in accordance with IS: 101

**10.1. Mass PER 10 litres:** 21.5 kg per 10 litres, minimum

**10.2. Consistency:** Paint shall be mixed so that it produces a smooth and uniform paint suitable for application.

Revisions: As per 40 <sup>th</sup> MOM of MRC-CPO			<b>APPROVED:</b> INTER PLANT MATERIAL RATIONALISATION COMMITTEE – MRC(CPO)		
Rev. No.03	Amd. No.	Reaffirmed	Prepared HPBP, Trichy	Issued Corp. R&D	Dt. of 1 <sup>st</sup> Issue Dec 2001
Dt:26-05-2012	Dt:	Year:			

# CORPORATE PURCHASING SPECIFICATIONS



- 10.3. Drying time at room temp. (Hard dry):** 4 hours, maximum.
- 10.4. Volatile matter, percent by mass :** 30.0 maximum.
- 10.5. Pigment content, percent by mass :** 65.0 minimum.
- 10.6. Volume solids, percent :** 35.0, minimum.
- 10.7. Dry film thickness :** 45.0 microns, minimum.
- 10.8. Flash point :** 15° C, minimum.
- 10.9. Pot life at ambient temperature (Annexure-A):** 6.0 hours, minimum.
- 10.10. Metallic zinc content on the non-volatile of the paint (Annexure-B):**  
85.0 percent by mass, minimum.

## 11.0 TYPE APPROVAL:

### 11.1. Samples:

Samples for type approval testing shall be accepted only from those manufacturers whose manufacturing and testing facilities are considered satisfactory to ensure continuous supply of good product.

### 11.2. Type tests:

#### **11.2.1. Protection against corrosion under condensation using abrasive blasted steel panel for 28 days (IS 101, Part 6/Section 1):**

The test panel, after testing period, shall not show any film deterioration and corrosion of the steel. Crippage shall not more than 3mm on either side of the scribe lines for passing the test.

#### **11.2.2. Resistance to salt spray for 30 days (Annexure-C):**

The test panel, after testing period, shall not show any film deterioration and corrosion of the steel. Crippage shall not more than 3mm on either side of the scribe lines for passing the test.

## 12.0 TEST CERTIFICATES

Unless otherwise stated, three copies of test certificates shall be supplied along with each consignment giving following information:

In addition, the supplier shall ensure to send one copy of test certificate along with the dispatch documents to facilitate quick clearance of the materials.

BHEL order

AA56114 , Rev 03 : EPOXY BASED ZINC RICH PRIMER PAINT (TWO PACK)

Manufacturer's/supplier's Name:

Trade name/mark, if any:

Batch/Lot No.:

Quantity supplied:

Date manufacture & expiry:



# CORPORATE PURCHASING SPECIFICATIONS

AA56114

Rev. No. 03

PAGE 3 of 5

Test results of clause 9.0

Mixing ratio

## 13.0 KEEPING PROPERTY

When stored in covered dry place in the original sealed containers under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture which shall be subsequent to the date of placement of BHEL order.

## 14.0 PACKING AND MARKING

Unless otherwise stated, base and hardener shall be packed separately in steel containers of approximate capacities. Each container shall bear the following information:

AA56114 EPOXY BASED ZINC RICH PRIMER PAINT (TWO PACK)

BHEL Order No.

Manufacturer's/ Supplier's name:

Trade name / mark, if any:

Batch/Lot No.:

Name of components:

Mixing ratio:

Quantity supplied:

Date of manufacture & expiry:

## 15.0 ENVIRONMENTAL REQUIREMENTS:

The supplier shall furnish Material Safety Data Sheet (MSDS) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal along with each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable

## 16.0 REFERRED STANDARDS (Latest Publications Including Amendments):

- 1) IS: 101
- 2) IS: 14589

# CORPORATE PURCHASING SPECIFICATIONS



## ANNEXURE - A (Cl 10.9)

If the mixed paint, as recommended by the supplier, could be still thinned, the end of the working life (pot life) has not been reached. The end of the working life is reached when the test material (paint) gels, becomes stringy or cannot be thinned for application. The time interval between the mixing time and time of gelling shall be reported as pot life of the mixed paint.

## ANNEXURE - B (Cl 10.10)

### DETERMINATION OF METALLIC ZINC

#### I. Reagents required:

- a) 0.1 N Potassium Permanganate
- b) Ferric chloride solution: 20 g of ferric chloride ( $FeCl_3 \cdot 6 H_2O$ ) and 20ml of 20% sodium solution.
- c) Anhydrous sodium acetate 20% solution.
- d) Zimmerman - Reinhardt solution: One litre of solution contains 67g of manganese sulphate ( $Mn SO_4 \cdot 4 H_2O$ ), 130ml of concentrated sulphuric acid and 138ml of phosphoric acid.

#### II. Procedure:

0.2g of the sample of the pigment is weighed and transferred to 600ml Erinmeyer flask and 50ml of ferric chloride solution is added. The flask is agitated constantly till all zinc is completely dissolved. 50ml of Zimmerman -Reinhardt solution and 250ml of water are added. This is titrated with 0.1 N Potassium permanganate solution till a pink colour is obtained. A blank determination is also carried out using the same amounts of reagents.

#### III. Calculation:

$$\text{Metallic zinc percent, by mass} = \frac{(V-B)N \times 0.0327}{\text{Wt.of sample in gm}} \times 100$$

Where

V = ml of potassium permanganate solution required for titration

B = ml of potassium permanganate solution required for titration of blank

N = Normality of potassium permanganate solution and

W = wt. of the sample in gram

## ANNEXURE - C (Cl 11.2.2)

### RESISTANCE TO SALT SPRAY TEST

The test panels of size 50 mm X 1.5 mm of abrasive blasted steel shall be given one coat of paint to produce desired dry film thickness and the paint film is allowed to cure for seven days. In the middle of the panel a scribe mark extending up to metal is made. (Each mark 50 mm long using a cutting edge at least 0.75 mm wide). The painted panels shall be exposed to salt spray test continuously as described in 3 of IS 101 for 30 days.



# CORPORATE PURCHASING SPECIFICATIONS

AA56114

Rev. No. 03

PAGE 5 of 5

After specified period of exposure, the test panels shall be examined for deterioration and corrosion of the steel. Crippege shall not be more than 3mm on either side of the scribe lines for passing the test.



## CORPORATE PURCHASING SPECIFICATION

AA56134

Rev No.04

PREFACE SHEET

### HEAT RESISTANT ALUMINIUM PAINT - Gr.2 (TEMPERATURE UPTO 400°C)

FOR INTERNAL USE ONLY  
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

#### Equivalent/Comparable Standards:

INDIAN : IS 13183-1991, Gr: 2

#### User Plants and Replaced Plant Specifications/References:

1) HARDWAR : --

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the Interest of the company.

#### Revisions:

As per clause 44.4.a) of MOM of MRC-CPO+NM

#### APPROVED:

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.04

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-01-1980

Dt:01-02-2005

Dt:

Year:2015

**This page intentionally left blank**



## CORPORATE PURCHASING SPECIFICATION

AA56134

Rev No. 04

PAGE 1 of 4

### HEAT RESISTANT ALUMINIUM PAINT - Gr.2 (TEMPERATURE UPTO 400°C)

#### 1 GENERAL

This specification governs the quality requirements of Heat Resistant Aluminium Paint which shall be capable to withstand temperature upto 400°C and possible to paint by brush or air spray methods without reduction in viscosity.

#### 2 APPLICATION

The paint shall be suitable for heat resistant application on the surfaces of steam/gas turbine components and other machine parts which are exposed to an operating temperature of 400°C as well as to protect against moderate corrosion.

#### 3 COMPLIANCE WITH NATIONAL STANDARDS

The material shall conform to the requirements of following national standard and also shall meet other requirements of this specification.

IS 13183-1991, Gr. 2: Aluminium Paint, Heat Resistant-Specification.

#### 4 COLOR

That of metallic Aluminium

#### 5 FINISH

Bright, smooth & lustrous

#### 6 FREEDOM FROM DEFECTS

The paint shall remain free from defects like hard settling of pigments, skinning when kept in a closed container and livering (excessive viscosity build up) during its rated shelf life.

The dried coating of paint shall be free from defects like bittiness, floating of pigments, leafing/flaking of film from substrate etc.

#### 7 CHEMICAL COMPOSITION

The paint shall be based on special heat resistant silicone binder pigmented with fine grade of aluminium paste and extender pigments in suitable proportion so as to meet the requirements of this specification.

The supplier of the material has to certify that the paint supplied is free from natural resins and free from lead or its compound to meet requirements of ISO 14001. The supplier should provide IR-Spectrograph in support of above composition.

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

#### Revisions:

As per clause 44.4.a) of MOM of MRC-CPO+NM

#### APPROVED:

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.04

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-01-1980

Dt:01-02-2005

Dt:

Year:2015

## 8 TEST SAMPLES

Tender samples will not be required when once the type approval is given and the supplier/ manufacturer declares that the materials for which tender is given is of the same quality and composition as that of type approved sample. Representative sample of the homogenised paint shall be drawn in accordance with IS 101.

## 9 TEST METHODS

When tested in accordance with IS 101 and Appendix of this specification, the test samples shall show the following properties:

## 10 PROPERTIES

### 10.1 Drying Time

- a) Surface dry: 1hr, max.
- b) Hard dry: 18hrs, max.

### 10.2 Consistency: 20 sec. min.

### 10.3 Non-volatile matter content: 30% by mass, min.

### 10.4 Volume solids: 20%, min.

### 10.5 Scratch hardness: To pass the test 6H pencil hardness.

### 10.6 \*Flexibility & adhesion:

To pass the test when tested after 48 hrs of air drying.

### 10.7 \*Water resistance (IS 13183): To pass the test.

### 10.8 \*Salt spray resistance (IS 13183): To pass the test.

### 10.9 Mass in kg/10 litres: $10.3 \pm 0.5$

### 10.10 Resistance to heat:

Film of paint when tested as per Appendix, shall show no cracking, blistering, flaking or peeling.

NOTE: \* These texts shall be conducted after full cure.

## 11 KEEPING PROPERTY

When stored in a covered dry place in the original sealed container under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture which shall be subsequent to the date of placing the order.



## CORPORATE PURCHASING SPECIFICATION

AA56134

Rev No. 04

PAGE 3 of 4

### 12 TEST CERTIFICATES

Unless otherwise specified, three copies of test certificates shall be supplied along with each consignment.

In addition, the supplier shall ensure to send one copy of test certificates along with the despatch documents to facilitate quick clearance of the material.

The test certificates shall bear the following information:

AA56134 (Rev.No.04): HEAT RESISTANT ALUMINIUM PAINT - Gr.2(TEMPERATURE UPTO 400°C)

BHEL Order No. & Date

Manufacturer's/Supplier's Name.

Trade Mark, if any.

Batch/Lot No.

Date of Manufacture & Expiry.

Quantity supplied

Test results of 7 and 10

### 13 PACKING AND MARKING

The paint shall be supplied in sealed and leak proof metal containers in size as per BHEL order. Each container shall bear the following information neatly written or pasted at suitable location on it.

AA56134: HEAT RESISTANT ALUMINIUM PAINT - Gr.2(TEMPERATURE UPTO 400°C)

BHEL Order No.

Manufacturer's/Supplier's Name.

Trade Mark, if any.

Batch/Lot No.

Date of Manufacture & Expiry.

Quantity supplied.

### 14 REFERRED STANDARDS (Latest Publications Including Amendments)

- 1) IS 101

## Appendix (10.10)

### TESTING OF HEAT RESISTANCE

Prepare and clean the test panels made from hot rolled steel. Apply the paint uniformly on the test panels. Air dry the panels for 30 minutes and bake subsequently at  $250\pm10^{\circ}\text{C}$  for 1 hour. Cool the test panels for room temperature. Place the panels in the oven / furnace maintained at following schedule:

4 hours at  $300^{\circ}\text{C}$

1 hour at  $400^{\circ}\text{C}$

Remove the panels from oven/furnace, cool and examine the coating for any cracking, blistering, flaking, peeling or leafing of paint film.

In absence of above surface defects, the material is deemed to have passed the heat resistance test.



## HIGH BUILD BLACK COAL TAR EPOXIDE PAINT

### 1.0 GENERAL:

This specification governs the quality requirements of two pack anticorrosive High Build Black Coal Tar Epoxide Paint which shall be capable of being brushed or sprayed by suitable thinning with the recommended thinner, if any, so as to obtain a dry film thickness of 4 to 5 mils (100-125 $\mu$ m) per coat.

### 2.0 APPLICATION:

Suitable for application where high humidity, total immersion in water, severe saline atmospheric condition and chemically corrosive environments prevail.

### 3.0 COLOUR: Black.

### 4.0 COMPLIANCE WITH NATIONAL STANDARDS:

Assistance has been derived from IS: 14948 in preparation of this specification.

### 5.0 FINISH: Smooth and uniform (See note at clause 9.0).

### 6.0 FREEDOM FROM DEFECTS:

The paint shall remain free from defects like hard setting of pigments, skinning when kept in closed container and livering (excess viscosity build up) during its rated shelf life.

The dried paint film shall be free from defects like bittyness, floating of pigments, surface haze, orange peeling, colour fading, wrinkles, etc.

### 7.0 CHEMICAL COMPOSITION:

The paint shall be composed of suitable grade of coal tar pitch, epoxy resins and accelerator in appropriate proportions to comply with the requirements of this specification. The infra-red spectrograph of epoxy resin used in binder shall be strictly adhered to that of type approved sample. Pigments and extenders used in the composition shall be resistant to chemicals and water.

### 8.0 TEST SAMPLES:

Tender samples will not be required when once the type approval (Clause 10.0) is given and the Supplier concerned declares that the material for which the tender is given is of the same quality as the type approved sample.

Representative samples of the material shall be drawn and treated as prescribed in IS: 101.

Revisions: As per 40 <sup>th</sup> MOM of MRC -CPO			APPROVED: INTERPLANT MATERIAL RATIONALISATION COMMITTEE-MRC (CPO)		
Rev. No.05	Amd.No.	Reaffirmed	Prepared BHPAL	Issued Corp. R&D	Dt. of 1st Issue January, 1980
Dt:26.05.2012	Dt:	Year:			



#### 9.0 PROPERTIES:

The paint shall be so thinned as to obtain a dry film thickness of 4 to 5 mils per coat. When tested in accordance with relevant parts and clauses of IS: 101 and Appendix-1 to this specification, the test samples shall show the following properties.

#### 9.1 Drying Time at room temperature:

Surface dry : 4 hours maximum.  
Hard dry : 16 hours maximum.

#### 9.2 Scratch Hardness (type Test)\*:

After the film is cured for 7 days under ambient conditions and tested under a load of 1200 g, no such scratch as to show the base metal shall be produced.

#### 9.3 Flexibility And Adhesion (Type Test)\*:

The film shall not show sign of damage, detachment or cracking when tested after 7 days curing under ambient conditions.

9.4 **Flash Point** : Not below 25°C.

9.5 **Pot Life (Appendix-1):** 4 to 8 hours, min.

9.6 **Epoxy Resin Content:** 25% minimum by mass.

9.7 **Volume solid:** 64%, minimum

#### 9.8 Recoating Property:

The painted film shall be capable of receiving one more coat of the same paint between 24 and 96 hours of applying the first coat.

#### 9.9 Effect of Boiling Water for 48 Hours On Cured Film (Type Test):

No softening or peeling off, of the film shall take place.

#### 9.10 Effect of Heating at 150°C + 2°C in Air For 48 Hours:

No softening or peeling off, of the film shall take place.

**\*Note:** Scratch hardness, flexibility and adhesion and finish tests shall be conducted on painted grit blast steel panel while the other conditions of IS: 101 remaining unchanged.

#### 10.0 TYPE APPROVAL:

##### Samples:

Samples for type approval testing shall be accepted only from those manufacturers whose manufacturing and testing facilities are considered satisfactory to ensure continuous supply of good product.

#### 11.0 TEST CERTIFICATES:

Unless otherwise stated, three copies of test certificates shall be supplied along with each consignment.

In addition, the supplier shall ensure to send one copy of the test certificates along with the dispatch documents to facilitate quick clearance of the material.



## CORPORATE PURCHASING SPECIFICATION

AA 561 35

Rev. No. 05

PAGE 3 OF 3

The test certificates shall bear the following information:

AA 561 35 (Rev. 05): High Build Black Coal Tar Epoxide Paint.

Supplier's Name and Trade Mark, if any.

Batch No.

Date of Manufacture and Expiry.

Test results of clauses 7.0 and 9.0.

### 12.0

#### KEEPING PROPERTY:

When stored in a covered dry place in the original sealed container under normal temperature conditions, the base and accelerator when mixed in appropriate proportions shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture, which shall not be earlier than one month from the scheduled delivery date mentioned in BHEL order.

### 13.0

#### PACKING & MARKING:

Unless otherwise stated, base and accelerator shall be packed separately in steel containers of appropriate capacities.

If stated in BHEL order, the recommended thinner shall also be supplied in sufficient quantity.

Each container shall bear the following information:

AA 56135: High Build Black Coal Tar Epoxide Paint. (Base / Accelerator)

BHEL Order No.

Manufacturer's/Supplier's Name.

Trade Mark, if any.

Batch No.

Date of Manufacture & Expiry.

Quantity.

### 14.0

#### ENVIRONMENTAL REQUIREMENTS:

The supplier shall furnish Material Safety Data Sheet (**MSDS**) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal alongwith each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable.

### 15.0

#### REFERRED STANDARDS (Latest Publications Including Amendments)

1. IS: 101

2. IS: 14948

#### APPENDIX - 1 DETERMINATION OF POT LIFE (CLAUSE 9.6)

About 100 ml of the mixed paint prepared by mixing the base and accelerator in the recommended proportions is taken in a beaker. The paint shall be such that it should be usable by brush under a specified pot life of 6 - 12 hours at room temperature.

In order to see if the paint has jelled or not, a small quantity of the mixed paint is dissolved in the recommended thinner. It should not dissolve if the paint has jelled and vice-versa.



## CORPORATE PURCHASING SPECIFICATION

AA56149

Rev No.01

PREFACE SHEET

### HEAT RESISTANT ALUMINIUM PAINT-Gr. 1 (TEMPERATURE UPTO 600°C)

FOR INTERNAL USE ONLY  
REMOVE THIS PREFACE BEFORE ISSUE TO SUPPLIERS

#### Equivalent/Comparable Standards

INDIAN

: IS 13183-1991, Gr: 1

#### User Plants and Replaced Plant Specifications/References:

HARIDWAR

: HW56176

#### Revisions:

As per Clause 44.4.a) of MOM of MRC-CPO+NM

#### APPROVED:

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.01

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-06-2001

Dt:01-02-2005

Dt:

Year:2015

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

**This page intentionally left blank**



## CORPORATE PURCHASING SPECIFICATION

AA56149

Rev No. 01

PAGE 1 of 4

### HEAT RESISTANT ALUMINIUM PAINT-Gr. 1 (TEMPERATURE UPTO 600°C)

#### 1 GENERAL

This specification governs the quality requirements of Heat Resistant Aluminium Paint which shall be capable to withstand temperature upto 600°C.

#### 2 APPLICATION

The paint shall be used as primer and finishing paint on steam turbine components like HP casing, IP casing, ESV & CV casing etc., and on other components where temperature is likely to go upto 600°C. The paint shall be capable of being brushed or air sprayed on the components.

#### 3 COMPLIANCE WITH NATIONAL STANDARDS

The material shall conform to the requirements of following national standard and also shall meet other requirements of this specification.

IS 13183-1991, Gr. 1: Aluminium Paint, Heat Resistant specification

#### 4 COLOR

That of metallic Aluminium

#### 5 FINISH

The dried coating shall be bright, smooth and lustrous.

#### 6 FREEDOM FROM DEFECTS

The paint shall remain free from defects like hard settling of pigments, skinning when kept in a closed container and living (excessive viscosity build up) during its rated shelf life.

The dried paint film shall be free from defects like bittness, floating of pigments, surface haze, orange peel, colour fading, wrinkles etc.

#### 7 CHEMICAL COMPOSITION

The paint shall be based on special grade of silicone binder of required thermal stability of 600°C, pigmented with aluminium paste and extenders in suitable proportions so as to meet the requirements of the specification. The supplier should provide IR-Spectrograph in support of above composition.

**COPYRIGHT AND CONFIDENTIAL**  
The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

#### Revisions:

As per Clause 44.4.a) of MOM of MRC-CPO+NM

#### APPROVED:

INTERPLANT MATERIAL RATIONALISATION  
COMMITTEE – MRC(CPO+NM)

Rev No.01

Amd No.

Reaffirmed

Prepared  
HEEP, Haridwar

Issued  
Corp.R&D

Dt. of 1<sup>st</sup> Issue  
01-06-2001

Dt:01-02-2005

Dt:

Year:2015

## 8 PROPERTIES

The material when tested in accordance with relevant parts and clauses of IS 101 shall show the following properties.

### 8.1 DRYING TIME

- 8.1.1 Surface Dry : 1 hour, max.
- 8.1.2 Tack free : 3 hours, max.
- 8.1.3 Hard Dry : 18 hours, max.
- 8.2 NON VOLATILE MATTER : 30% by mass, min.
- 8.3 CONSISTENCY : 20 secs. min. at  $27\pm2^\circ\text{C}$
- 8.4 SCRATCH HARDNESS

To pass the test at 6H pencil hardness, when tested on the paint film dried for 48 hours at room temperature.

- 8.5 VOLUME SOLIDS : 20%, min.
- 8.6 FLASH POINTS : Not below  $27^\circ\text{C}$
- 8.7 MASS PER TEN LITRES :  $10.3\pm0.5$  kg

### 8.8 \*SALT SPRAY RESISTANCE

The film of the paint shall pass the salt spray test when the panel is exposed for 96 hours in salt spray cabinet. The test panel shall be of cold rolled steel and the paint film is dried in air for 30 minutes followed by heating at  $250^\circ\text{C}$  for one hour and cooled to room temperature before loading for the test.

### 8.9 \*WATER RESISTANCE

The film of the paint shall show no more than slight whitening or dulling in comparison to the fresh sample, when immersed the test panel in water for 24 hours at  $27\pm2^\circ\text{C}$ .

### 8.10 RESISTANCE TO HEAT

To pass the test when tested as per Annexure.

### 8.11 \*FLEXIBILITY AND ADHESION

To pass the test when the paint panel is dried for 48 hours at room temperature and then subjected to bend test.

### 8.12 PROTECTION AGAINST CORROSION UNDER CONDITIONS OF CONDENSATION

To pass the test when the test panel is dried for 48 hours at RT and then subjected to an exposure in temperature humidity chamber for a period of 7 days.

Note: \* Test shall be conducted after the paint is fully cured.

## 9 TYPE APPROVAL

Samples for type approval testing shall be accepted only from reputed and those manufacturers whose manufacturing and testing facilities are considered satisfactory to ensure continuous supply of consistent and good product.



## CORPORATE PURCHASING SPECIFICATION

AA56149

Rev No. 01

PAGE 3 of 4

### 10 TEST CERTIFICATES

Unless otherwise stated, three copies of test certificates shall be supplied giving the following information. In addition, the supplier shall ensure to send one copy of the Test certificate along with despatch documents for quick clearance of material.

AA56149, Rev 01: HEAT RESISTANT ALUMINIUM PAINT-Gr. 1(TEMPERATURE UPTO 600°C)

BHEL order & Date

Supplier's Name & Trade Mark, if any

Batch/Lot No.

Date of Manufacture & Expiry

Test Results of clauses 7 & 8

Quantity of the lot.

T.C. No & Date.

### 11 KEEPING PROPERTY

When stored in a covered dry place in the original sealed container under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture which shall be subsequent to the date of placing the order.

### 12 PACKING AND MARKING

The paint shall be supplied in sealed and leak proof metal containers preferably in 4 litres size and each container shall bear the following information:

AA56149: HEAT RESISTANT ALUMINIUM PAINT-Gr. 1(TEMPERATURE UPTO 600°C)

BHEL Order No.

Manufacturer's/Supplier's Name

Trade Mark, if any

Batch/Lot No.

Date of Manufacture & Expiry

Quantity supplied

### 13 ENVIRONMENTAL REQUIREMENTS

The supplier shall furnish Material Safety Data Sheet (MSDS) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal along with each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable.

### 14 Referred Standards (Latest Publications Including Amendments)

- 1) IS 101

**Annexure (CI 8.10)****TESTING OF HEAT RESISTANCE****A.1 COLD ROLLED STEEL**

Prepare and clean the test panels made from cold rolled steel. Apply the paint uniformly on the test panels. Air dry the panels for 30 minutes and bake subsequently at 250°C for 1 hour. Cool the test panels for room temperature. Place the panels in the furnace at 600 ± 5°C for a period of 24 hours. Remove the panels from the furnace cool and examine the surface for any cracking, blistering, flaking or peeling. In absence of above surface defects, the material is deemed to have passed the heat resistance test.

**A.2 HOT ROOLED STEEL**

Take test panels of low carbon steel, clean them thoroughly using hydrocarbon solvent. Coat these test panels with paint under test so as to get a coating thickness of 25-30 microns. Dry them in air for 24 hours. Keep these test panels in the furnace and are subjected to following heating schedule.

Expose the test panels for 8 hours at 400°C followed by further heating for 8 hours at 500°C and finally for 8 hours at 600°C. The panels shall be removed from the furnace for short interval for physical examination.

In absence of above surface defects, the material is deemed to have passed the heat resistance test.



## CORPORATE PURCHASE SPECIFICATION

AA 567 08

Rev. No. 04

PAGE 1 OF 2

### THINNER FOR EPOXY PAINTS

#### 1.0 GENERAL:

This specification governs the quality requirements of Thinner for all types of Epoxy Paints.

#### 2.0 COMPLIANCE WITH NATIONAL STANDARDS:

There is no Indian standard covering the requirements of this material.

#### 3.0 FREEDOM FROM DEFECTS:

The material shall be clear and free from sediments, suspended and undissolved matters.

#### 4.0 TEST SAMPLE:

1/2 litre sample shall be drawn from each consignment for testing and approval.

#### 5.0 COMPOSITION:

The material shall be a blend of either esters, ketones and/or Aromatic hydrocarbons.

#### 6.0 PROPERTIES:

The material shall be compatible with all types of epoxy and stoving (priming & finishing) paints.

#### 7.0 TEST CERTIFICATES:

Unless otherwise stated, three copies of test certificates shall be supplied, alongwith each consignment, giving the following information:

In addition, the supplier shall ensure to send one copy of the test certificates along with the despatch documents to facilitate quick clearance of the material.

AA 56708 (Rev. 04) : Thinner For Epoxy Paints.

BHEL Order No.

Supplier's/Manufacturer's Name & Trade Mark, if any.

Batch No,

Date of Manufacturer & Expiry, if any,

Test results of Cl.6.0.

**Revisions:**  
**As per 40<sup>th</sup> MOM of MRC -CPO**

**APPROVED:**  
**INTERPLANT MATERIAL**  
**RATIONALISATION COMMITTEE-MRC (CPO)**

<b>Rev. No. 04</b>	<b>Amd.No.</b>	<b>Reaffirmed</b>	<b>Prepared</b>  <b>BHOPAL</b>	<b>Issued</b>  <b>Corp. R&amp;D</b>	<b>Dt. of 1st Issue</b>
<b>Dt. 26.05.2012</b>	<b>Dt :</b>	<b>Year:</b>			<b>AUGUST, 1988</b>



#### 8.0 PACKING AND MARKING:

The material shall be suitably packed in 20 litre drums to avoid damage during transit.' Each container shall be marked with the following information:

AA 56708: Thinner for Epoxy Paints.

BHEL Order No.  
Manufacturer's/ Supplier's Name.  
Trade Mark, if any.  
Date of Manufacturer & Expiry, if any,  
Batch No,  
Quantity Supplied.

#### 9.0 ENVIRONMENTAL REQUIREMENTS:

The supplier shall furnish Material Safety Data Sheet (**MSDS**) covering all information relating to human safety and environmental impacts of the hazardous materials particularly during their transportation, storage, handling and disposal alongwith each supply.

Each container shall be marked with corresponding symbol and minimum worded cautionary notice for flammable / corrosive / toxic / harmful / irritant and oxidizing etc. as applicable

#### 10.0 REFERRED STANDARDS (Latest Publications Including Amendments):

– NIL –

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 1 OF 12

PAINTS REQUIRED FOR TURBINE & COMPRESSOR AND ITS AUXILIARY SYSTEM  
APPLICATIONS**1. INTRODUCTION**

This specification defines the list of paints required for painting external & internal surfaces following components:

1. Steam Turbine
  - a) Outer Casing, Balance piston piping, inter connecting piping and LP Governing valve
  - b) Bearing pedestals, Governing assemblies and Rotor lifting equipment.
2. Compressor
3. Base frame of Compressor & Turbine
4. Base frame of LO reservoir internal
5. Base frame of LOP & EOP
6. Assembly of LOP & EOP
7. BHEL fabricated Dry gas seal control & filter skid etc.

**2. MATERIALS**

The list of rationalized varieties of Primers, Intermediate & Finish Paints, Thinners & Putties etc., required for main production purpose is given in the Variant table. Any deviation from this standard without written deviation permit from appropriate authority will result in rejection of job. The supplied paint shall be suitable for the metallic structures blasted surface finish SSPC-SP-10(Near white metal).

**3. CODES & STANDARDS**

IS-5	Colour coding
RAL DUTCH	International Standard for Colour Shade (Dutch Standard)
IS-101	Methods of test for ready mixed paints and enamels.
IS-2379	Indian Standard for pipe line identification –color code
ASTM Vol 6.1&6.3	American standard test methods for paints and coatings.
SSPC	Steel Structure Painting Council
ANSI A 13.1	Scheme for identification of piping systems: American National Standards Institution

The paint Supplier shall provide the instructions/ documents for the following:

- a) Instructions for storage to avoid exposure as well as extremes of temperature.
- b) Surface preparation prior to painting.
- c) Mixing and thinning preparation.
- d) Application of paints and recommended limit on time intervals between coats.
- e) Suggested Quality assurance procedures.

**4. PAINT MATERIALS**

Paint manufacturers shall furnish the characteristics of all paints materials on printed literature along with the test certificate for all specified characteristics given in this

Revisions: Var no. 37 added (Refer Page 10)			Issued : STANDARDS ENGINEERING & IPR COORDINATION DEPARTMENT		
Rev. No. 08	Amd .No.	Reaffirmed:	Prepared: Manager (Comp. Engg.)	Approved: Sr. DGM (ME, R&D and EC)	Date of 1 <sup>st</sup> issue: 21 MAY 2019
Dt. 02 Sep 2023	Dt.	Year:			

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 2 OF 12

specification. All the paint materials shall be on first quality and confirm to the following general characteristics as per the tables 4.1, 4.2, 4.3 and 4.4.

TABLE No. 4.1 PRIMER PAINT REQUIREMENTS

Sr. No.	Description	P1	P2	P3	P4	P5
1	Technical Name	Inorganic zinc silicate coating	Epoxy zinc phosphate Primer	Epoxy Zinc Rich Primer	Zinc Dust Graphite Paint	Epoxy Phenolic
2	Material Code	<b>HY9050001017 (VAR-01)</b>	<b>HY9050001025 (VAR-02)</b>	<b>HY9050001033 (VAR-03)</b>	<b>HY9050001254 (VAR-25)</b>	<b>HY9050001297 (Var-29)</b>
3	Type and composition	A two pack air drying self-curing solvent based inorganic zinc Silicate coating with Minimum 80% Zinc content on dry film. The Final cure of the dry film shall pass the MEK Rub Test.	Two component polyamine cured epoxy resin medium pigmented with zinc Phosphate.	A two-pack polyamide cured high solid, high build epoxy Zinc Rich Primer	Primer containing Zinc dust (31 +/- 2 % by wt.) and Graphite (24 +/- 2 %)	Two pack ambient temperature curing epoxy phenolic coating system
4	Volume Solids (approx.)	60 +/- 3 %	50 +/- 1 %	64 +/- 2 %	40 +/- 2 %	67
5	DFT (Dry Film thickness) per coat in microns (approx.)	65-75 $\mu$	40-50 $\mu$	60-125 $\mu$	40-45 $\mu$	75-100
6	Theoretical covering capacity in M <sup>2</sup> /coat/litre (approx.)	8-9	8-10	8-9	10-11	4-5
7	Weight per liter in kgs/liter (approx.)	2.3 +/- 0.03	1.4 +/- 0.05	2.4 +/- 0.03	2.3 +/- 0.03	1.65 ± 0.03
8	Touch dry at 30 °C (approx.)	30 minutes	After 30 min	After 1 hr	After 12 hr	3
9	Over coating interval (approx.)	Min : 12 hrs at 20° C & 50% RH	Min.: 8 hrs.	Min.: 8 hrs.	Min.: 24 hrs.	Mon: 36 Hrs
10	Pot life (approx) at 30 °C for two component paints	4 to 6 hrs	6 to 8 hrs.	4 to 6 hrs	12 to 18 hrs	4-6

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 3 OF 12

11	(approx.)					
	Temperature Resistance (Minimum)	400 °C (Dry Service)	80 °C (Dry Service)	150 °C (Dry Service)	450 °C (Dry Service)	150 (Method A)

**TABLE No. 4.2 INTERMEDIATE PAINT REQUIREMENTS**

Sr. No.	DESCRIPTION	I1	I2	I3
1	Technical Name	Epoxy high build Coating	Epoxy high build MIO	Epoxy-High Build Aromatic
2	<b>Material Code</b>	<b>HY9050001041 (VAR-04)</b>	<b>HY9050001220 (VAR-22)</b>	<b>HY9050001351 (VAR-34)</b>
3	Type and Composition	Polyamide cured Epoxy resin medium suitably pigmented	Polyamide cured Epoxy resin medium suitably pigmented with MIO	Aromatic amine cured epoxy resin medium suitably pigmented.
4	Volume Solids (approx.)	60 +/- 3 %	57 +/- 3 %	60 +/- 3 %
5	DFT (Dry Film thickness) per coat in microns (approx.)	100-125μ	100-125μ	100-125μ
6	Theoretical covering capacity in M2/coat/litre (approx.)	5-6	5-6	5-6
7	Weight per liter in kgs/liter (approx.)	1.42+/-0.03	1.42+/-0.03	1.42+/-0.03
8	Touch dry at 30 °C (approx.)	3 hrs	3 hrs	3 hrs
9	Over coating interval at 30 °C (approx.)	Min : 12hrs	Min : 12hrs	Overnight. Max.: 5 days
10	Pot life (approx.) at 30 °C for two component paints (approx.)	4-6 hrs	4-6 hrs	4-6 hrs
11	Temperature Resistance (Minimum)	80 °C (Dry Service)	80 °C (Dry Service)	80 °C (Dry Service)

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.



TABLE No. 4.3 FINISH PAINT REQUIREMENTS

Sl. No.	Description	F1	F2	F3	F4
1	Technical Name	Heat resistant silicone aluminum paint suitable up to 600°C dry temperature.	Acrylic polyurethane paint	Aliphatic polyester polyurethane paint	INERT POLYMERIC MATRIX COATING
2	Material Code	HY9050001050 Aluminum (VAR-05)  HY9050001335 Basalt Grey (RAL 7012) (VAR-32)	HY9050001068 Phirozi Blue (VAR-06) HY9050001076 Brilliant Green (VAR-07) HY9050001084 White Aluminum (VAR-08) HY9050001092 Dark admiralty grey (VAR-09) HY9050001190 Basalt grey (VAR-19) HY9050001246 Blue grey (VAR-24) HY9050001270 White Grey (VAR-27) HY905001289 Jet Black (Var-28) HY9050001009 Bluish Green (Var-33)  HY9050001360 Smoke Grey Shade no.692 of IS:5 (Var-36)  HY9050001394 SKY BLUE 101 (Var-37)	HY9050001106 Light Grey (VAR-10)  HY9050001114 White Grey (VAR-11)	HY9050001203 Aluminum (VAR-20)
3	Type and composition	Single pack silicone resin based medium with Aluminum flakes.	Two-pack aliphatic isocyanate cured acrylic finish paint	Two component polyester polyurethane finish paint	Suitable for high temp service & under approx.on coating for CS,AS & SS
4	Volume Solids (approx.)	20+/- 2 %	40 +/- 3 %	57 +/- 2 %	50+/- 2 %

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 5 OF 12

Sl. No.	Description	F1	F2	F3	F4
5	DFT (Dry Film thickness) per coat (approx.)	15 to 20 $\mu$	30-40 $\mu$	75-125 $\mu$	100-125
6	Theoretical covering capacity in M2/coat/litre (approx.)	8-10	11-15	8-10	3 minimum
7	Weight per liter in kgs/liter (approx.)	1 +/- 0.03	1.15+/-0.03	0.383+/-0.03	>1.3
8	Touch dry at 30 °C (approx.)	30 min	30 Minutes	1 hr	1 hr
9	Over coating interval (approx.)	Min. : 24 hrs	Min : 12 hrs.	Min: 12 hrs.	Min: 6 hrs.
10	Pot life (approx.) at 30 °C for two component paints (approx.)	Not applicable	6-8 hrs.	4 hrs.	1 hrs
11	Temperature Resistance	600 °C Dry service	80 °C Minimum (Dry Service)	93 °C Minimum (Dry Service)	650 °C Minimum

**COPYRIGHT AND CONFIDENTIAL**  
 The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
 It must not be used directly or indirectly in any way detrimental to the interest of the company.

TABLE No. 4.4 THINNERS REQUIREMENT

SI. NO.	TECHNICAL NAME	MATERIAL CODE
1	THINNER FOR INORGANIC ZINC SILICATE -(P1)	HY9050001122 (VAR-12)
2	THINNER FOR EPOXY ZINC PHOSPHATE PRIMER (P2)	HY9050001130 (VAR-13)
3	THINNER FOR EPOXY ZINC RICH PRIMER (P3)	HY9050001149 (VAR-14)
4	THINNER FOR EPOXY-HIGH BUILD COATING – (I1)	HY9050001157 (VAR-15)
5	THINNER FOR HEAT RESISTANT SILICONE ALUMINIUM PAINT - (F1)	HY9050001165 (VAR-16)
6	THINNER FOR ACRYLIC POLYURETHANE FINISH Paint – (F2)	HY9050001173 (VAR-17)
7	THINNER FOR ALIPHATIC ACRYLIC POLYESTER POLYURETHANE FINISH Paint PAINT - (F3)	HY9050001181 (VAR-18)
8	THINNER FOR INERT POLYMERIC MATRIX COATING- (F4)	HY9050001211 (VAR-21)
9	THINNER FOR EPOXY-HIGH BUILD MIO – (I2)	HY9050001238 (VAR-23)
10	THINNER FOR ZINC DUST GRAPHITE PAINT – (P4)	HY9050001262 (VAR-26)
11	THINNER FOR EPOXY PHENOLIC PAINT- (P5)	HY9050001319 (VAR-31)
12	THINNER FOR AROMAETIC AMINE CURED EPOXY RESIN (I3)	HY9050001343 (VAR-35)

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

**NOTES:**

1. For all the three type of Paints (Primer, Intermediate, Finish) & Respective Thinners shall be procured from the same manufacturer
2. Paint manufacturer shall submit the Technical data sheets for all paints at the time of submission of quotations/ offers.
3. Technical data sheet shall have the Application of paint, typical equipment's details, thinner mixing ratio, application conditions, curing schedule etc. shall be as per paint manufacturer instruction.

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 7 OF 12

VARIANT TABLE

VARNO	TECHNICAL NAME	TYPE & COMPOSITE	MATERIAL CODE
1	INORGANIC ZINC SILICATE COATING (P1)	A two-pack air drying self-curing solvent based inorganic zinc silicate coating with minimum 80% zinc content on dry film. The final cure of the dry film shall pass the MEK rub test.	HY9050001017
2	EPOXY ZINC PHOSPHATE PRIMER (P2)	Two-component polyamine cured epoxy resin medium, pigmented with zinc phosphate.	HY9050001025
3	EPOXY ZINC RICH PRIMER (P3)	Two component Zinc rich Epoxy primer	HY9050001033
4	EPOXY-HIGH BUILD COATING (I1)	polyamide cured epoxy resin medium suitably pigmented	HY9050001041
5	HEAT RESISTANT SILICONE ALUMINIUM PAINT SUITABLE UPTO 600 <sup>0</sup> C DRY TEMP. (F1) <b>Color shade:</b> <b>Aluminium</b>	Single pack silicone resin based medium with Aluminium flakes.	HY9050001050
6	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Phirozi Blue</b>	Two-pack aliphatic isocyanate cured acrylic finish paint.	HY9050001068
7	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Brilliant Green</b>	Two-pack aliphatic isocyanate cured acrylic finish paint.	HY9050001076
8	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>White Aluminium</b>	Two-pack aliphatic isocyanate cured acrylic finish paint.	HY9050001084
9	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Dark Admiralty Grey</b>	Two-pack aliphatic isocyanate cured acrylic finish paint.	HY9050001092
10	ALIPHATIC ACRYLIC POLYESTER POLYURETHANE FINISH PAINT (F3) <b>Color shade:</b> <b>Light Grey</b>	Two-pack aliphatic acrylic polyester polyurethane finish paint.	HY9050001106

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 8 OF 12

VARNO	TECHNICAL NAME	TYPE & COMPOSITE	MATERIAL CODE
11	ALIPHATIC ACRYLIC POLYESTER POLYURETHANE FINISH PAINT (F3) <b>Color shade:</b> white Grey	Two-pack aliphatic acrylic polyester polyurethane finish paint.	HY9050001114
12	THINNER FOR INORGANIC ZINC SILICATE	THINNER FOR VAR 01	HY9050001122
13	THINNER FOR EPOXY ZINC PHOSPHATE PRIMER	THINNER FOR VAR 02	HY9050001130
14	THINNER FOR EPOXY ZINC RICH PRIMER	THINNER FOR VAR 03	HY9050001149
15	THINNER FOR EPOXY-HIGH BUILD COATING	THINNER FOR VAR 04	HY9050001157
16	THINNER FOR HEAT RESISTANT SILICONE ALUMINIUM PAINT	THINNER FOR VAR 05 & 32	HY9050001165
17	THINNER FOR ACRYLIC POLYURETHANE FINISH Paint	THINNER FOR VAR 06, 07, 08, 09, 19, 24, 27, 28, 36 & 37	HY9050001173
18	THINNER FOR ALIPHATIC ACRYLIC POLYESTER POLYURETHANE FINISH Paint	THINNER FOR VAR 10 & 11	HY9050001181
19	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> Basalt grey	Two-pack aliphatic isocyanate cured acrylic finish paint.	HY9050001190
20	INERT POLYMERIC MATRIX COATING (F4) <b>Color shade:</b> Aluminium	Suitable for high temperature service and under insulation coating for CS, AS & SS	HY9050001203
21	THINNER FOR INERT POLYMERIC MATRIX COATING	THINNER FOR VAR 20	HY9050001211
22	EPOXY-HIGH BUILD MIO (I2)	polyamide cured epoxy resin medium suitably pigmented with MIO	HY9050001220

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.

TD218  
Rev.00PLANT STANDARD  
HYDERABAD

HY 90 500 01

Rev No.: 08

Page 9 OF 12

VARNO	TECHNICAL NAME	TYPE & COMPOSITE	MATERIAL CODE
23	EPOXY-HIGH BUILD MIO	THINNER FOR VAR 22	HY9050001238
24	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Blue Grey</b>	Two-pack aliphatic isocyanate cured acrylic finish paint	HY9050001246
25	ZINC DUST GRAPHITE PAINT (P4) <b>Color shade:</b> <b>Aluminium</b>	Primer containing Zinc dust and Graphite	HY9050001254
26	THINNER FOR ZINC DUST GRAPHITE PAINT (P4)	THINNER FOR VAR 25	HY9050001262
27	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>White Grey</b>	Two-pack aliphatic isocyanate cured acrylic finish paint	HY9050001270
28	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Jet Black</b>	Two-pack aliphatic isocyanate cured acrylic finish paint	HY9050001289
29	EPOXY PHENOLIC PRIMER (P5) <b>Colour Shade:</b> <b>Aluminium</b>	Two pack ambient temperature curing epoxy phenolic coating system	HY9050001297
31	THINNER FOR EPOXY PHENOLIC PAINT (P5)	THINNER FOR VAR-29	HY9050001319
32	HEAT RESISTANT SILICONE ALUMINIUM PAINT SUITABLE UPTO 600 <sup>0</sup> C DRY TEMP. (F1) <b>Color shade:</b> <b>BASLT GREY (RAL7012)</b>	Single pack silicone resin based medium with Aluminium flakes.	HY9050001335
33	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Bluish Green</b>	Two-pack aliphatic isocyanate cured acrylic finish paint	HY9050001009

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.



TD218  
Rev.00

**PLANT STANDARD  
HYDERABAD**

**HY 90 500 01**

Rev No.: **08**

Page 10 OF 12

VARNO	TECHNICAL NAME	TYPE & COMPOSITE	MATERIAL CODE
34	EPOXY-HIGH BUILD-AROMATIC (I3)	AROMATIC AMINE CURED EPOXY RESIN MEDIUM SUITABLY PIGMENTED.	HY9050001351
35	THINNER FOR AROMATIC AMINE CURED EPOXY RESIN MEDIUM SUITABLY PIGMENTED.	THINNER FOR EPOXY-HIGH BUILD-AROMATIC (I3)	HY9050001343
36	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>Smoky Grey 692</b>	Two-pack aliphatic isocynate cured acrylic finish paint	HY9050001360
37	ACRYLIC POLYURETHANE FINISH PAINT (F2) <b>Color shade:</b> <b>SKY BLUE 101</b>	Two-pack aliphatic isocynate cured acrylic finish paint	HY9050001394

**COPYRIGHT AND CONFIDENTIAL**  
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.  
It must not be used directly or indirectly in any way detrimental to the interest of the company.



TD218  
Rev.00

## PLANT STANDARD HYDERABAD

HY 90 500 01

Rev No.: 08

Page 11 OF 12

### 5. Referee Methods

Drying time - ASTM D1640  
Solids Content - ASTM D2697  
VOC Content - ASTM D3960  
Flash point - ASTM D3278

### 6. FREE FROM DEFECTS

The paint shall remain free from defects like hard settling of pigments, skinning when kept in a closed container and levering (excessive viscosity build up) during its rated shelf life. The dried coating of paint shall be free from defects like bittiness, floating of pigments, leafing/flaking of film from substrate etc.

### 7. STORING PROPERTY

When stored in a covered dry place in the original sealed container under normal temperature conditions, the material shall retain the properties prescribed in this specification for a period of 12 months after the date of manufacture, which shall be subsequent to the date of placing the order.

### 8. TEST SAMPLES

Tender samples will not be required when once the type approval is given and the supplier /manufacturer declares that the materials for which tender is given is of the same quality and composition as that of type approved sample. Representative sample of the homogenised paint shall be drawn in accordance with applicable standard.

### 9. TEST CERTIFICATES

Unless otherwise specified, three copies of test certificates shall be supplied along with each consignment. In addition, the supplier shall ensure to send one copy of test certificates along with the despatch documents to facilitate quick clearance of the material.

The test certificates shall bear the following information:

BHEL material no. with description  
BHEL Order No. & Date  
Manufacturer's / Supplier's Name  
Trade Mark, if any  
Batch / Lot No  
Date of Manufacture & Expiry  
Quantity supplied  
Applicable Test results

### 10. PACKING AND MARKING

The paint shall be supplied in sealed and leak proof metal containers in size as per BHEL order. Each container shall bear the following information neatly written or pasted at suitable location on it.

BHEL material no. with description  
BHEL Order No.  
Manufacturer's/Supplier's Name  
Trade Mark, if any  
Batch/Lot No.  
Date of Manufacture & Expiry  
Quantity supplied  
Paint data sheet



TD218  
Rev.00

## PLANT STANDARD HYDERABAD

HY 90 500 01

Rev No.: 08

Page 12 OF 12

## RECORD OF REVISIONS

COPYRIGHT AND CONFIDENTIAL

The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.

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

**INSTRUCTIONS TO BIDDER (ITB)**

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

SI. No.	DETAILED TERMS & CONDITIONS	BIDDER RESPONSE (YES/NO)	DEVIATIONS / COMMENT
1	<b>SCOPE OF SUPPLY:</b> Signed & Sealed offers are invited for the Scope of Supply of goods or services or both as detailed in the enquiry. Relevant enclosures/supporting documents / catalogue, if any shall be enclosed to the technical offer.		
2	<b>DEFINITIONS</b> A 'The Buyer' means BHEL-HPEP, Ramachandrapuram, Hyderabad-502 032 of Bharat Heavy Electricals Limited (A Govt. of India Undertaking) incorporated under the companies Act having its registered office at BHEL House, Siri fort, New Delhi-110049, India and shall be deemed to include its successors and assigns. It may also be referred to as BHEL. B 'The Bidder' means the persons, firm, company or organization on whom the Purchase order is placed and shall be deemed to include the bidder's successors, representatives, heirs, executors and administrator as the case may be. It may also be referred to as Contractor, supplier or bidder. C 'Contract' shall mean and include the Purchase order incorporating various documents viz., Notice Inviting Tender (NIT), Offer, Letter Of Intent/Acceptance (LOI/LOA), Instruction to Bidders (ITB) and Special Conditions of Contract (SCC), specifications, inspection/quality plan, schedule of prices and quantities, drawings, if any, enclosed by Bidder/ provided by the Buyer or his authorized nominee and the samples or patterns if any to be provided under the provision of the contract. In case of any inconsistency or contradiction between any of the documents, the order of precedence shall be Purchase Order, LOI/LOA followed by Minutes Of Meeting (MOM), NIT, SCC, ITB. D 'Parties to the contract' shall mean the bidder and the buyer as named in the main body of the Purchase Order. E 'Goods/Material' shall include Works and Services which are incidental or consequential to supply.		
3	<b>GENERAL INSTRUCTIONS:</b> A Mode of submission of offer shall be as indicated in SCC B The quotation should be neatly typed and free from over writing/ erasures. Any correction or addition must be authenticated. The offer including annexures and brochures should be submitted in English / Hindi. All Pages of Techno Commercial Bids (Main Pages), ITB, SCC should be signed and Stamped. If there is a conflict in case of bilingual submission, the submission in English will be final. Prices shall be quoted both in figures and words. In case of any discrepancy in value, the prices quoted in words shall be considered for evaluation and establishing L1 Status. Any discount / revised offer / bids submitted by a bidder on his own shall be considered, provided it is received on or before the due date and time of offer / bid submission (Part-1). Conditional discounts shall not be considered for evaluation of tenders. C Incomplete offers are liable for rejection. D Bidders to please note that the Terms & conditions contained in this document and SCC are to be read fully before submission of quotations. E Bidders are advised to comply with ITB and SCC, should there be any deviations (where deviations are permitted), it shall be entered in the deviation column. BHEL reserves the right to reject such offers or load the bid suitably for evaluation. F Offers shall be submitted directly, only by the bidder or by their authorized representative / agent and the offer should be in line with the regulatory guidelines (i.e. A valid Agency agreement between principal bidder and agent / representative shall be attached and the agreement shall cover the scope of services rendered by Agent, Agency Commission and any other information called for as per the regulatory guidelines). OEM / Mill details shall be provided if bidder is not a manufacturer. Bid envelops shall bear the name of Bidder. In case of submission through authorized representative/agent, the name of representative/agent should also be mentioned apart from bidder name. G Offer received after the specified time and date of submission will be rejected. No further correspondence shall be entertained. H Unsolicited offers will not be considered.		<b>Non Deviatable</b>
4	<b>OTHER PARTICULARS (Please indicate applicable data)</b> A Name of the Bid currency (freely tradable foreign currency for imports and Indian Rupees for indigenous purchase). B Name of the Port of loading and Port of Discharge (applicable to imports).		

<b>5</b>	<b>BID SUBMISSION PROCEDURE FOR CONVENTIONAL TENDER:</b>	
<b>A</b>	<b>For Single Part Bids:</b>	
	<p>The complete bid shall be submitted in a single sealed cover superscribing the Tender number and due date, addressed to Sr DGM/CMM, Vendor Complex, BHEL, Hyderabad and sent by appropriate mode to above address or dropped in tender box located at vendor complex on or before the specified time and date of submission of offers, preferably in the bidder's envelope. E-mail bids shall be sent to mail ID <a href="mailto:pricebid_hyd@bhel.in">pricebid_hyd@bhel.in</a> only as an attachment.</p>	<b>Non Deviatable</b>
<b>B.</b>	<b>For two-Part Bids:</b>	
i	<p>The offer is to be submitted in two parts viz., Techno-commercial Bid - (Part-I), with all technical specification &amp; scope including bill of material etc., Earnest Money Deposit (EMD)(wherever applicable) and unpriced bid with all applicable Commercial Terms and Conditions, rates of agency commission, duties, taxes and other charges, Signed and Stamped ITB and SCC, <u>except the price</u>, shall be kept in a separate sealed cover, superscribing enquiry No. (Techno-Commercial Bid) and due date AND Price Bid (Part-II), containing ONLY the price (including agency commission, if any) and the applicable duties/taxes/other charges shall be kept in a separate sealed cover superscribing Enquiry no. (Price bid) &amp; due date.</p> <p>Both the above covers (Part –I &amp; II) shall be kept in a Third cover superscribing Enquiry no. &amp; due date.</p> <p>Bidder can also submit offer through email. Technical offer to be submitted to mail ID <a href="mailto:technicalbid_hyd@bhel.in">technicalbid_hyd@bhel.in</a>, and price bid to be submitted to mail ID <a href="mailto:pricebid_hyd@bhel.in">pricebid_hyd@bhel.in</a> only as an attachment. Interchanging the information in the mails may lead to rejection of the offer. Bidder shall have no claim on e-mail offers sent to any other e-mail ID.</p> <p>In case of e-mail offers, the mail subject should contain Enquiry Number, Due date and Bidder name. Bidder address including contact details shall be mentioned in the content of the mail. Without these details, the offer is liable for rejection.</p> <p>All techno commercial terms &amp; conditions mutually agreed prior to price bid opening shall prevail and supersede any terms and conditions specified otherwise in price bid.</p>	<b>Non Deviatable</b>
ii	The bidders whose bids are techno commercially not accepted will be informed and EMD shall be returned wherever submitted.	
iii	Bidders will be allowed to submit the impact on their quoted prices due to changes in technical scope, specifications, and commercial terms/conditions as specified in NIT which in the opinion of BHEL , warrant changes in prices.	<b>Non Deviatable</b>
C	Bids shall be opened on due time and date in the presence of bidders who may like to be present. Only one representative of each bidder shall be permitted to attend the bid opening. Only the price bids of bidder (in case of two part bid) whose techno commercial bids are accepted will be opened later on a specified date.	<b>Non Deviatable</b>
<b>6</b>	<b>DELIVERY TERMS</b>	
<b>A</b>	<b>Indigenous Purchase</b>	
	<p>a. Terms of Delivery for dispatches to BHEL Hyderabad (HPEP) shall be FOR Destination.</p> <p>b. Terms of Delivery for Direct Dispatch (DD) items shall be Ex Works.</p> <p>i. Incase specified in SCC that insurance is in customer/BHEL scope, price quoted shall include Freight charges up to Destination.</p> <p>ii. Otherwise, price quoted shall include Freight and Insurance upto Destination. However, beneficiary for insurance shall be BHEL.</p>	
<b>B.</b>	<b>Imports</b>	
	The goods shall be delivered on FCA capital airport basis in case of freight by Air and CIP basis in case of freight by Sea.	
<b>7</b>	<b>Documentation for Payment</b>	
<b>A</b>	<b>Indigenous Purchase</b>	
	<p>Following documents shall be submitted immediately on dispatch of material to BHEL HPEP / Site</p> <p>a. Two numbers of Original Tax Invoice (Refer ITB clause no 11 for Tax Compliance)/ e-invoice of GST Portal if applicable)</p> <p>b. Packing List - clearly showing number of packages, gross weight and net weight.</p> <p>c. Test/Warranty/Guarantee certificates, O&amp;M Manual (If specified in SCC)</p> <p>d. Insurance intimation/declaration certificate</p> <p>e. Pre-dispatch Inspection report /Third Party Inspection Certificates.</p> <p>f. Consignee copy of LR signed &amp; stamped by Customer/Site representative for DD Items</p> <p>g. e-waybill</p> <p>h. Any other documents as specified in SCC.</p>	<b>Non Deviatable</b>

B	<p>Softcopies of the above documents shall be uploaded in SUVIDHA portal <a href="https://suvidha.bhel.in/suvidha/">https://suvidha.bhel.in/suvidha/</a> or <a href="https://hpep.bhel.com/mm/main.jsp">https://hpep.bhel.com/mm/main.jsp</a> Vendor Bills tab. immediately after dispatch of the material. Upload of Documents is mandatory for material Entry.</p> <p><b>Imports</b></p> <p>i) Bidder shall inform BHEL the readiness of material along with packing details 30 days in advance from the date of delivery. For Hazardous cargo/DG cargo, supplier must provide the following documents prior to handing over shipment to freight forwarder, wherever freight is in BHEL scope:</p> <ol style="list-style-type: none"><li>1. Valid MSDS</li><li>2. DGD certificate with appropriate UN numbers.</li><li>3. Labelling and marking on DG cargo along with photo of packaging.</li><li>4. Self-declaration for consignment</li><li>5. Packaging Certificate as per DG Standards</li><li>6. TSA Approved Truckers details to be provided to forwarder at the time of shipment</li></ol> <p>In addition to the above, supplier should ensure to comply all IATA DG regulations, if any new requirement is added in future.</p> <p>ii). Bidder shall also upload the soft copy of the dispatch documents consisting of BL / AWB, Invoice, delivery note, packing list, country of origin &amp; Test certificates and other documents as specifically indicated in the SCC in PRADAN Portal (<a href="https://hpep.bhel.com/mm">https://hpep.bhel.com/mm</a>) within Five days from the B/L date for sea shipment and One day from AWB date for Air shipment and sent to email ids: mssea@bhel.in, msair@bhel.in, cmmfe@bhel.in.</p> <p>iii) AWB/BL must contain the information of BHEL GST no., and PAN no.</p> <p>iv) <b>Air Shipments:</b> Bidder shall ensure the following</p> <ol style="list-style-type: none"><li>a) Port of discharge -- Mumbai/Chennai/Hyderabad (as indicated in SCC).</li><li>b) Consignee shall be BHEL, Hyderabad. Material shall be air freighted through cargo mode only and not through Courier.</li><li>c) Upon handing over the cargo to the forwarder, bidder shall ensure the acknowledgement receipt with wordings "Cargo handed over in sound condition for Air freighting".</li></ol> <p>Note: Warehouse receipt will not be considered for penalty calculations.</p> <p>d) In case of CIF/ shipments, bidder shall also inform BHEL the information about discharge port agent details and cargo arrival information within one day from the date of Shipment.</p> <ol style="list-style-type: none"><li>e) Following dimensions of single package may be noted.<ol style="list-style-type: none"><li>i). Maximum dimension of the cargo(ODC) -- 125" x 88" x 63"</li><li>ii). Maximum weight of the cargo -- 3.5 MT.</li></ol></li></ol> <p>If any package dimension or weight exceeds the above set limits, it will be treated as Over Dimension Cargo (ODC) or Over Weight Cargo and bidder shall inform BHEL 30 days in advance to the delivery date to enable BHEL to finalize the freight forwarder.</p> <p>f). If package falls under Hazardous category, bidder shall communicate BHEL 30 days in advance period with document support.</p> <p>v) <b>Sea Shipments:-</b> bidder shall ensure the following</p> <ol style="list-style-type: none"><li>a). Port of discharge -- Nhavaseva/Mumbai/Chennai.</li><li>b). Place of Delivery / Final Destination for CIP shipments - Nhavaseva CFS / Chennai CFS.</li><li>c). In case of FOB shipments, bidder shall handover the material to BHEL nominated forwarder and obtain the cargo receipt.</li><li>d). If the material cannot be containerized in 20 or 40 GP containers, an advance information of 30 days prior to the delivery date shall be communicated to BHEL for necessary arrangements and finalisation of freight forwarder.</li></ol> <p>e). <b>For CIP shipments</b></p> <ol style="list-style-type: none"><li>1. In case of FCL shipments, Detention free period must be 14 days.</li><li>2. Bidder shall also inform BHEL the information about discharge port agent details and cargo arrival information within 5 days from the date of Shipment.</li><li>3. No charges for the services rendered till place of destination will be payable by BHEL. Incase liner / forwarder insist for charges, not in the scope of BHEL, the same will be adjusted from bidder account.</li><li>4. In case of CIF shipments -- Bidder must select a forwarder/liner whose discharge port published tariff for THC and other services is available. Any charges over and above the published tariff will not be borne by BHEL or will be adjusted from the bidder's bill.</li><li>5. bidder must insure the cargo for 110% of material value including the freight amount.</li></ol> <p>(vi). Recovery charges for non-submission of documents: - Bidder shall submit all the required documents to BHEL as prescribed in the Purchase order and NIT.</p>		
---	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

	<p>If BHEL incurs any charges such as Penalty, demurrage, container detention, wharfage, storage, Ground rent etc., due to non - compliance / non - submission of documents prescribed in Purchase Order/ NIT/Letter of credit, the same shall be recovered from the bidder as under:</p> <p>1. EUROPE/USA/Black Sea/ Far East/Middle East/South East sector</p> <p><b>A. For FOB Sea Consignments:-</b></p> <p>Penalty for late submission / negotiation of documents beyond 14 days shall be as under:</p> <table border="1"> <thead> <tr> <th data-bbox="256 511 323 819">Sl. no</th><th data-bbox="323 511 525 819">Period (From Date of Bill of Lading)</th><th data-bbox="525 511 817 819">Recoverable Charges</th><th data-bbox="817 511 1109 819">Recoverable Charges per day per container</th><th data-bbox="1109 511 1334 819"></th></tr> <tr> <th data-bbox="256 819 323 819"></th><th data-bbox="323 819 525 819"></th><th data-bbox="525 819 817 819">LCL per week/ Break bulk cargo per day</th><th data-bbox="817 819 1109 819">20FT Container</th><th data-bbox="1109 819 1334 819">40FT Container</th></tr> </thead> <tbody> <tr> <td data-bbox="256 819 323 870">i</td><td data-bbox="323 819 525 870">Upto 14th day</td><td data-bbox="525 819 817 870">Nil</td><td data-bbox="817 819 1109 870">Nil</td><td data-bbox="1109 819 1334 870">Nil</td></tr> <tr> <td data-bbox="256 870 323 889">ii</td><td data-bbox="323 870 525 889">15th day onward</td><td data-bbox="525 870 817 889">USD 10</td><td data-bbox="817 870 1109 889">USD 110</td><td data-bbox="1109 870 1334 889">USD 200</td></tr> </tbody> </table> <p><b>B. For CIP Sea Shipments: -</b></p> <p>Bidder shall provide rates for detention charges after free period at the time of offer itself in case of engagement of 20FT Container and 40FT category. In case of late presentation of documents to the bank recovery will be effected from the Bidder as per the rates quoted by the Bidder at the time of offer in this regard.</p> <p>In case of Break bulk cargo and LCL, Demurrage charges shall be recovered at the rate of USD 1 per Ton per day and storage charges at the rate of USD 10 per week respectively shall be charged as late presentation charges.</p> <p>(vii) Description of items in invoice, packing list, BL / AWB or LR shall be same as PO item description. Bidders shall ensure that invoice shall contain PAN nos. of both bidder and BHEL along with other tax related numbers. BHEL PAN AAACB4146P and BHEL TAN HYDB00086C Any other additional documents sought by the statutory authorities, the same shall be produced by the bidder on priority basis.</p> <p>(viii) Bidder shall provide package details including number of packages, gross weight, net weight etc.</p> <p>(ix) The bidder shall provide the following documents at the time of submission of offer:</p> <ul style="list-style-type: none"> <li>a) No Business Connection in India declaration issued by the bidder as per the format specified. (or)</li> <li>b) (i) No Permanent Establishment in India declaration issued by the bidder as per the format specified. <ul style="list-style-type: none"> <li>(ii) Tax Residence Certificate issued by the bidder's tax authorities.</li> <li>(iii) Form 10F, as attached in Annexure V, to be issued by the bidder.</li> </ul> </li> <li>c) In case the bidder has a Business Connection in India as per Section 9 of Income Tax Act or significant economic presence in India as per rule 11 UD of IT Act or Permanent Establishment in India as per Article 5 of Double Taxation Avoidance Agreement between India and the bidder's country, the bidder shall provide a withholding tax order issued by the Indian Income Tax authority for recovery of applicable tax.</li> </ul>	Sl. no	Period (From Date of Bill of Lading)	Recoverable Charges	Recoverable Charges per day per container				LCL per week/ Break bulk cargo per day	20FT Container	40FT Container	i	Upto 14th day	Nil	Nil	Nil	ii	15th day onward	USD 10	USD 110	USD 200		
Sl. no	Period (From Date of Bill of Lading)	Recoverable Charges	Recoverable Charges per day per container																				
		LCL per week/ Break bulk cargo per day	20FT Container	40FT Container																			
i	Upto 14th day	Nil	Nil	Nil																			
ii	15th day onward	USD 10	USD 110	USD 200																			
8	<p><b>Delivery Schedule</b></p> <p>The tendered goods shall be delivered within the period stipulated in NIT/ SCC as accepted. Inordinate delay/early supply are liable for rejection/Hold on payment.</p>		<b>Non Deviatable</b>																				
9	<p><b>Pricing Terms</b></p> <p>Quoted price shall be inclusive of Packing &amp; Forwarding and shall remain firm and valid during the execution of PO. Offers with PVC will be rejected outright except in cases where specifically called for in the SCC.</p>		<b>Non Deviatable</b>																				
10	<p><b>PRICE VALIDITY :</b></p> <p>Unless otherwise specified, offer shall be valid for a period of 90 days from the date of bid opening (Technical bid /part-I in case of two part bid).</p> <p>However the prices quoted for spare parts of the Main equipment shall be kept valid for a period as specified in SCC.</p>		<b>Non Deviatable</b>																				

11 Taxes & Duties (RATE TO BE INDICATED by the bidder against the space provided )		Non Deviatable
A	<p><b>Indigenous Purchase</b></p> <p>i) Only valid GST registered bidders will be considered for the tender. The GSTIN of the bidder should be clearly mentioned in the offer.</p> <p>ii) If bidder is exempted from GST registration under any provision of the GST Law, a declaration with due supporting documents should be furnished for considering the offer.</p> <p>iii) Bidder to quote the applicable taxes in the following manner:</p> <ul style="list-style-type: none"><li>- Harmonized System of Nomenclature (HSN) of Goods</li><li>- Services Accounting Code(SAC) of Services.</li></ul> <p>iv) Bidders to ensure correct applicability of IGST/CGST/SGST/UTGST based on the Inter / Intra state movement of goods/services.</p> <p>v) In case Bidder has opted for GST Composition Scheme, the same may be stated explicitly both in their technical and price bids. An undertaking to the effect that any change in the status of the bidder will be intimated.</p> <p>vi) Any other taxes &amp; duties not covered anywhere above may be indicated separately.</p> <p><b>Taxes deducted at source:</b></p> <ul style="list-style-type: none"><li>- TDS as per the extant statutes shall be deducted.</li><li>- In case bidder does not provide PAN details, higher rate of tax shall be deducted as per the Act.</li><li>- Concessional certificates, if any, should be provided well in time for lower deduction of tax.</li></ul>	
	<p><b>Terms &amp; Conditions to be complied</b></p> <ol style="list-style-type: none"><li>1. All invoices (incl. Credit Notes, Debit Notes) to contain BHEL HPEP GSTIN ie 36AAACB4146P1ZG. Invoices submitted should be in the format as specified under GST Law. All details as mentioned in Invoice Rules including Dealer GST registration number (GSTIN), invoice number with date of issue, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST, IGST mentioned separately, HSN Code / SAC Code etc.</li><li>2. Reimbursement of GST amount will be made only upon completion of the following:<ol style="list-style-type: none"><li>i. Bidder declaring such invoice in their GSTR-1 Return/ IFF</li><li>ii. Receipt of Goods or Services and Submission of Tax invoice by BHEL</li><li>iii. The tax invoice is reflected in the GSTR2B of BHEL, HPEP (buyer). Payment of GST will be made only if it is matching with data uploaded by the Bidder in GST portal.</li></ol></li><li>3. In case of discrepancy in the data uploaded by the bidder in the GSTN portal vis-a-vis the tax invoice or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit. The same would be available in PRADAN Portal for the bidder's information. Bidder has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims for processing of such invoices.</li><li>4. In cases where invoice details have been uploaded by the bidder but failed to remit the GST amount to GST Department within stipulated time, then GST on the invoices in default will be recovered from the bidder along with the applicable interest.</li><li>5. In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, such GST amount will be recoverable from bidder along with interest levied/ leivable on BHEL.</li><li>6. GST TDS deducted as per GST Act, is uploaded in GSTN portal along GSTR7. Bidders can directly download the GST TDS Certificate from the GSTN Portal.</li><li>7. Bidders to note that Rules &amp; Regulations pertaining to E-way bill system are to be strictly adhered to, as and when notified by Govt. authorities.</li><li>8. Vendors who fall under the E-Invoice regulations, i.e., having an annual turnover of Rs. 10 crores (<b>Rs 5 crore w.e.f 01.08.2023</b>) in the previous year shall issue e-invoice in line with Rule 48(4) of CGST Rules failing which GST amount will not be reimbursed to the vendor even if the other requirements are fulfilled.</li><li>9. In case the vendor is exempted by the GST department under the Rule 48(4) of CGST Rules from issuing E-invoice, a declaration as prescribed in the Notification 17/2022 - Central Tax dated 01-08-2022 shall be provided on the invoice.</li><li>10. Vendors who do not fall under the E-Invoice regulations, i.e., whose annual turnover is less than Rs. 10 crores (<b>Rs 5 crore w.e.f 01.08.2023</b>) in the previous year have to give an undertaking indemnifying BHEL that the vendor is not falling under the E-invoice requirement category and that in case of any breach of this E-invoicing requirement, the vendor indemnifies BHEL of any consequences that may arise due to such a breach.</li><li>11. No GST shall be levied on liquidated damages / penalty.</li></ol>	

B.	<b>Foreign Purchase ( Imports )</b>  The offered price shall be inclusive of all the Taxes and duties as applicable in country of export / country of dispatch for the quoted price. Taxes deducted at source: a. In case of goods or services subject to Income tax in India, such tax as per the extant statute shall be recovered. b. In case bidder does not provide necessary documents for beneficial taxation (Refer clause 7-B-(ix) a-c of ITB), the TDS deduction shall be at the maximum percentage stipulated as per the provisions of Income Tax Act.	<b>Non Deviatable</b>
<b>12 Payment Terms: Unless otherwise specified in SCC, following shall be the terms of Payment.</b>		
A	Indigenous: a. Micro & Small Enterprises (MSEs) - 100% Direct EFT payment within 45 days b. Medium Enterprises - 100% Direct EFT payment within 60 days c. Non MSME Bidders - 100% direct EFT Payment within 90 Days  Note A. Above due date is reckoned from the date of Receipt of material or 15 days from the date of submission of complete set of documents as per PO whichever is later. Objections, if any on the invoice, available on SUVIDHA portal need to be closed. In such instances, due date is reckoned from the closure of objections. Vendors are advised to get familiarized with the document exchange feature on SUVIDHA portal. Payment will be made for Material accepted value. B. MSEs (covered under MSME Act) need to register and renew periodically and update the same with BHEL C. The taxes that are reimbursed are limited to applicable taxes as on the Purchase Order delivery date or the amount actually paid whichever is less. D. Adherence to the above time schedule of payment is contingent upon Bidder complying with GST provisions and availment of Input Tax Credit by BHEL before the date of payment. E. In case of packaged items, 10% of supply value will be retained till completion of total supplies. F. Bidders to comply with clause 11 on GST requirements G. MSE benefits are not applicable to Traders / Wholesalers registered as MSEs. G. MSME vendors may avail the facility of invoice discounting through Trade Receivables Discounting System(TREDs) platforms like RXIL, INVOICEMART, M1XCHANGE and any other platforms onboarded from time to time.	
B	<b>Imports:</b> i) 100% payment (less Indian Agency Commission, if any) shall be through Wire Transfer with a credit period of 45 days - Cash Against Documents (CAD) ii) In case Bidder opts for Letter of Credit payment, the LC Usance period shall be 90 days with respective bank charges to respective accounts and loading of 0.50% iii) Indian Agency commission if payable and so specified in the Purchase order shall be paid in Indian Rupees, considering the SBI TT selling exchange rate, as on the date of payment after successful completion of the contract.	
C	<b>Conditions for LC:</b> a. LC validity period will be 90 days and for any extension, applicable charges will be to bidder's account. b. LC will be opened after successful completion of pre dispatch inspection prior to the scheduled / agreed delivery date. LC will be opened within 15 bank working days from the date of request.	<b>Non Deviatable</b>
D	<b>Conditions for both Indigenous &amp; Foreign Bidders:</b> a. In case Bidders insist for lesser Credit period and BHEL accepts, a loading of 0.60% for every 15 days reduction will be applicable. b. In case PBG as required is not furnished, Payment will be released deducting the BG amount, which will be paid after expiry of warranty period against submission of supplementary claim. c. Payment does not imply in any respect whatsoever a waiver of Buyer's right to performance of the Order. Buyer is entitled to set off claimable debts against claimable liabilities with the bidder by means of a setoff Note.	<b>Non Deviatable</b>
E	Wherever EMD is applicable, the EMD will be paid back to unsuccessful bidders within fifteen days after award of the contract. Successful bidder's EMD will be retained till submission of Performance Bank Guarantee (PBG). Tender Fee wherever applicable is not refundable. No interest shall be payable by BHEL on earnest money or security deposit or any money due to the contractor by BHEL.	<b>Non Deviatable</b>

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

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

18	<b>Evaluation and Loading Criteria:</b> i) Evaluation Currency for this tender shall be "INR". ii) Evaluation of prices shall be done item-wise unless otherwise specified in the SCC. iii) Evaluation shall be on the basis of delivered cost, i.e. "Total Cost to BHEL" w.r.t the finalized technical scope and commercial conditions (after considering incidence of applicable taxes and duties and loading). iv) In the course of evaluation, if more than one Bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 Bidders. In case more than one Bidder happens to occupy the L1 status even after soliciting discounts, the L1 Bidder shall be decided by a toss/draw of lots, in the presence of the respective L1 Bidders or their representatives. Ranking will be done accordingly. BHEL decision in such situations shall be final and binding.  <b>INDIGENOUS</b> a. Bidder shall ensure to indicate the applicable taxes against each line item, failing which the same will be considered as inclusive/NIL. b. Ex-works offers received (as against FOR Destination mentioned in enquiry) shall be loaded by 2% of Ex-works value. c. GST and any other charges quoted will be added to the base price. However, in case input credit is available for GST (SGST, CGST/IGST), the same shall be excluded for arriving at "Total Cost to BHEL"  <b>IMPORTS</b> For evaluation of offers in foreign currency, exchange rate (TT selling rate of State Bank of India) as on the date of bid opening (Part-I, in case of two-part bids) shall be considered. If the relevant day happens to be a bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken. In case of foreign Bidders, the quoted CIP price shall be loaded by the following factors to arrive at "Total Cost to BHEL": - Import duty as applicable on the date of Part-I bid opening.  - Loading will be as per the table below																									
	<table border="1"><thead><tr><th></th><th>Ex Works</th><th>FOB/F CA</th><th>CIF/C FR</th><th>CIP</th></tr></thead><tbody><tr><td>Foreign Inland freight and insurance</td><td>2%</td><td></td><td></td><td></td></tr><tr><td>Marine freight and marine insurance</td><td>3%</td><td>3%</td><td></td><td></td></tr><tr><td>Destination Port handling charges</td><td>0.50%</td><td>0.50%</td><td>0.50%</td><td></td></tr><tr><td>clearing charges &amp; inland freight and insurance</td><td>2%</td><td>2%</td><td>2%</td><td>2%</td></tr></tbody></table>		Ex Works	FOB/F CA	CIF/C FR	CIP	Foreign Inland freight and insurance	2%				Marine freight and marine insurance	3%	3%			Destination Port handling charges	0.50%	0.50%	0.50%		clearing charges & inland freight and insurance	2%	2%	2%	2%
	Ex Works	FOB/F CA	CIF/C FR	CIP																						
Foreign Inland freight and insurance	2%																									
Marine freight and marine insurance	3%	3%																								
Destination Port handling charges	0.50%	0.50%	0.50%																							
clearing charges & inland freight and insurance	2%	2%	2%	2%																						
	<p>COMMON LOADING FOR IMPORTS &amp; INDIGENOUS that will be added for arriving the "Total Cost to BHEL"</p> <p>A. Loading on Deviated Penalty clause shall be 10% or to the extent to which the bidder has opted for deviation. B. Loading for payment terms as per clause 12 of ITB C. Loading for deviation in Warranty &amp; PBG as per clause 16,17.</p>																									
19	Procurement directly from the manufacturers/ suppliers shall be preferred. However, no agent shall be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer / supplier could bid directly but not both. In case bids are received from both from the manufacturer/ supplier and the agent, bid received from the agent shall be ignored.																									
20	<b>RIGHT OF REJECTION /NON- PLACEMENT OF PO:</b> BHEL reserves the right to accept or reject any or all bid/s in full or part without assigning any reason whatsoever.																									
21	<b>INTEGRITY PACT</b> Bidders shall have to enter into Integrity Pact with BHEL as per Annexure VI - for Tender value of rupees two crores and above and shall be signed by the authorized signatory along with the offer, failing which Bidder's offer will be rejected.																									
22	<b>Public Procurement</b>																									
A	<b>Make in India</b> For this Procurement, the local content to categorize a bidder as a Class I local bidder / Class II local bidder / Non-Local bidder and purchase preference to Class I local bidder, is as defined in Public Procurement (Preference to Make in India) order No P-45021/2/2017-PP(BE-II) dated 04-06-2020 issued by DPIIT as amended from time to time. Proforma for self-certification for minimum local content and auditor's certification is given in Annexure III.																									

<b>B</b>	Any Bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with competent authority. GOI website <a href="https://www.mea.gov.in/">https://www.mea.gov.in/</a> to be referred for latest details of competent authority and exemptions . Proforma for self-certification for compliance is given in Annexure IV.												
<b>C</b>	<p><b>Startups:</b> For Start-ups duly registered with DPIIT (Copy of certificate to be provided), condition of prior turnover and prior experience in Public Procurement may be relaxed subject to meeting of Quality and Technical Specifications. Startups are exempt from paying EMD.</p>												
<b>23</b>	<b>Benefits earmarked for Purchase from Micro &amp; Small Enterprises (MSEs) – Indigenous Purchase</b>												
<b>A</b>	<p>All Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy are exempt from Paying EMD. NSIC/UDYAM registered bidders shall submit NSIC/UDYAM Certificate along with bid documents.</p> <p><b>Any Bidder falling under MSE category shall furnish the following details &amp; submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.</b></p> <table border="1"> <thead> <tr> <th>Type under MSE</th> <th>SC/ST Owned</th> <th>Women Owned</th> <th>Others (excluding SC/ST &amp; Women Owned)</th> </tr> </thead> <tbody> <tr> <td>Micro</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Small</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>Note: If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.</b></p> <p>Date to be reckoned for determining the deemed validity will be the last date of Technical bid submission. Non- submission of such document will lead to consideration of their bid, at par with other bidders and MSE status of such bidders shall be shifted to Non- MSE Category till the bidder submits these documents.</p>	Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women Owned)	Micro				Small			
Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women Owned)										
Micro													
Small													
<b>B</b>	MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) and subsequent amendments & clarifications, if any. Documents NSIC/UDYAM Certificate submitted by the bidder shall be verified by BHEL for rendering the applicable benefits.												
<b>C</b>	If an enterprise falling under MSME category as defined in the Act, graduates to a higher category from its original category or beyond the purview of the Act, it shall continue to avail all non-tax benefits of its original category notified by the Ministry of Micro, Small and Medium Enterprise for a period of three years from the date of such graduation to the higher category.												
<b>D</b>	BHEL HPEP is registered with TReDS ( RXIL , M1XCHANGE , InvoiceMart ) platform. MSME bidders are requested to get registered with TReDS(RXIL / M1XCHANGE / InvoiceMart/ exchanges added from time to time ) platform to avail the facility as per the GOI guidelines.												
<b>24</b>	Inspection Measuring and Test Equipment (IMTE) used by the Bidder/ Contractor or sub-contractor shall be calibrated, maintained and controlled. Calibration shall be valid and IMTE maintained in sound condition during usage.												
<b>25</b>	ISO-9001, ISO14001 & OHSMS 45001 shall be complied.												
<b>26</b>	If BHEL registered supplier is not quoting against this NIT, supplier shall send regret letter positively with valid reasons for not participating. Repeated lack of response on the part of supplier may lead to deletion of such registered supplier from BHEL's approved supplier's list as per BHEL SEARP Guidelines.												
<b>27</b>	<p><b><u>BREACH OF CONTRACT, REMEDIES AND TERMINATION</u></b></p> <p><b>27.1 BREACH OF CONTRACT:</b></p> <p>The following shall amount to breach of contract:</p> <ol style="list-style-type: none"> <li>Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.</li> <li>The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.</li> <li>The Supplier/Vendor delivers equipment/ material not of the contracted quality.</li> <li>The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.</li> <li>Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.</li> <li>Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.</li> <li>Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.</li> <li>Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.</li> <li>Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.</li> <li>Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.</li> </ol> <p>Note- Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.</p> <p>In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract</p>												

**27.2 Remedies in case of Breach of Contract.:**

i. Wherein the period as stipulated in the notice issued under clause 27.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.

ii. Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. 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 Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.

iii. Wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:

iv. In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.

v. If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:

a). from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.

b). If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.

vi. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor.

vii. It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.

viii. In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

ix. Non-performance of contract attracts penal provisions in line with BHEL guidelines for Suspension of Business Dealings (SBD).

Note: 1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:

(a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.

(b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners; or sole proprietorship firm owned by any partner(s) as a sole proprietor.

<b>28</b>	Any other terms and conditions of the bidder attached / referred against the tender enquiry will not be considered.
<b>29</b>	All drawings, patterns and tools supplied by BHEL or made at BHEL's expense are BHEL's property. These cannot be used or referred to any other party and must be used only in the execution of BHEL's orders.
<b>30</b>	Any amount payable by the bidder under any of the conditions of this contract shall be liable to be adjusted against any amount payable to the bidder under any other work / contract awarded by BHEL HPEP or any other BHEL Units. This is without prejudice to any other action as may be deemed fit by BHEL.
<b>31</b>	The bids of the bidders who are on the banned list and also the bids of the bidders, who engage the services of the banned firms, will be rejected. The list of firms banned by BHEL is available on BHEL web site: <a href="http://www.bhel.com">www.bhel.com</a>
<b>32</b>	<b>Ordering and confirmation of order</b>  The bidder shall send the order acceptance within one week from the date of LOI/Purchase order or such other period as specified/agreed by the Buyer. Buyer reserves the right to revoke the order placed if the order confirmation differs from the original order placed. Buyer shall be legally bound, only if agreed for any deviation explicitly in writing. The acceptance of deliverables or supplies by Buyer as well as payments made in this regard shall not imply acceptance of any deviations. The Purchase order will be deemed to have been accepted if no communication to the contrary is received within one week (or the time limit as specified /agreed by the Buyer) from the date of P.O. Buyer, is at liberty to send signed P.O. through electronic media such as e-mail and the receipt of which shall be treated as receipt of order.
<b>33</b>	<b>Execution</b>  The whole contract is to be executed in the most workman like manner, substantial and approved as per the contracted terms.
<b>34</b>	<b>Progress Report</b>  The bidder shall render such report as to the progress of work and in such form as may be called for by the Buyer from time to time. The submission and acceptance of such reports shall not prejudice the rights of the buyer in any manner. Bidder shall communicate to BHEL immediately, the change of address, ownership, contact person(s), the mobile numbers and e-mail of the dealing person concerned. Milestones shall be periodically updated by bidder through PRADAN Portal ( <a href="https://hpep.bhel.com/mm/">https://hpep.bhel.com/mm/</a> ). Non updation will adversely affect service rating of bidder performance.

35	<b>Non-disclosure Obligations</b>
	<p>Drawings, technical documents or other technical information received by one party shall not without the consent of the other party, be used for any other purpose than that for which they were provided. They may not, without the consent of the submitting party, otherwise be used or copied, reproduced, transmitted or communicated to third parties. All information and data contained in general product documentation, whether in electronic or any other form, are confidential and binding only to the extent that they are by reference expressly included in the contract.</p> <p>The bidder shall, as per agreed date/s but not later than the date of delivery, provide free of charge any information and/or drawings which are necessary to permit the Buyer to erect, commission, operate and maintain the product. Such information and drawings shall be supplied as specified in technical specification.</p> <p>All intellectual properties, including designs, drawings and product information etc. exchanged during the formation and execution of the contract shall continue to be the property of the submitting party.</p> <p>The bidder shall provide Buyer with all information pertaining to the delivery in so far as it could be of importance to Buyer. The bidder shall not reveal confidential information to its own employees not involved with the tender/contract and its execution and delivery or to third parties, unless Buyer has agreed to this in writing beforehand. The bidder shall not be entitled to use the Buyer's name in advertisements and other commercial publications including website without prior written permission from Buyer.</p> <p>In the event of violation of the confidentiality as agreed, BHEL will take legal action as deemed fit. Non-disclosure agreement to be entered as per <b>Annexure- II</b> wherever applicable.</p>
36	<b>Inspection and Testing</b>
A	<p>The goods and stores shall be manufactured by approved quality system and each part/component may be inspected and tested by the Buyer prior to shipment and shall comply with relevant requirements. Buyer has the right to inspect at any stage during manufacture/ delivery.</p>
B	<p>Buyer or his authorized representative shall be entitled at all reasonable times during execution to inspect, examine and test at the bidder's premises the material and workmanship of all stores to be supplied under the contract, and if the part of the stores are being manufactured at other premises, the bidder shall obtain for buyer or his authorized representative permission to inspect, examine and test as if the said stores are being manufactured at the bidder's premises. Such inspection, examination and testing, if made shall not release the bidder from any obligation under the contract.</p> <p>For indigenous bidders all costs related to first inspection request shall be borne by the buyer and the cost of subsequent inspections due to non-readiness of material/rework/ rejections shall be borne by the bidder. In case of imports all inspection charges including third party inspections if any shall be borne by the bidder. The cost of inspection staff/third party specified by the Buyer shall be borne by bidder unless otherwise specifically agreed. If the contract provides for tests on the premises of the bidder or any of his sub-contractor/s, bidder shall be responsible to provide such assistance, labor, materials, electricity, fuels, stores, apparatus, instruments as may be required and as may be reasonably demanded to carry out such tests efficiently.</p> <p>Cost of any type test or such other special tests shall be borne by the bidder unless otherwise specifically agreed in the contract.</p> <p>The Bidder shall give the authorized representative of the buyer reasonable notice in writing of the date on and the place at which any stores will be ready for inspection/ testing as provided in the Contract. Annexure – I, may strictly be complied with or the time lines. Any delay in submission of the documents by the bidder will not alter the delivery date.</p>
37	<b>Quality and Condition of the Deliverables</b>
	<p>The bidder shall be responsible for compliance with applicable technical, safety, quality, environmental requirements and other regulations in relation to products, packaging and raw and ancillary materials.</p>
38	<b>Packaging and Dispatch</b>
	<p>The bidder shall package the deliverables safely and carefully and pack them suitably in all respects considering the peculiarity of the material for normal safe transport by sea/air/rail/road to its destination suitably protected against loss, damage, corrosion in transit and the effect 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 by mechanical means. Special packaging conditions/ environmental conditions as defined in the NIT shall be fully complied.</p> <p>Each package must be marked with consignee name, address, P.O. number, Package Number, gross weight &amp; net weight, dimensions (Lx B x H) and bidder's name. The packing shall allow for easy removal and checking of goods on receipt and comply with carrier's conditions of packing or established trade practices. Packing list for goods inside each package with P.O. item No. &amp; quantity must also be fixed securely outside the box to indicate the contents. If any consignment needs special handling instruction, the same shall be clearly marked with standard symbols/instructions. Hazardous material should be notified as such and their packing, transportation and other protection must conform to relevant regulations.</p>
39	<b>Contract variations; Increase or decrease in the scope of supply</b>
	<p>Buyer may vary the contracted scope during execution due to exigencies of project requirement.</p> <p>If the bidder is of the opinion that the variation has an effect on the agreed price or delivery period, Buyer shall be informed of this immediately in writing along with technical details, and in the event of additional work, submit a quotation with regards to the price and period involved, as well as the effect this additional work will have on the other work to be performed by the bidder. Wherever unit rates are available in the contract, the same shall be applied to such additional work. The bidder shall not perform additional work before buyer has issued written instructions/amendment to the purchase order to that effect.</p> <p>The work which the bidder should have or could have anticipated in terms of delivering the service (s) and functionality (ies) as described in this agreement should be executed by the bidder without any price implication.</p> <p>In case of no change in the scope / technical specifications, bidder shall endeavor to keep the material ready and intimate the same to BHEL within the contractual delivery date, failing which, the delay if any will be attributed to supplier, and any upward price variation thereof for delivery at a later date is not admissible.</p>
40	<b>Rejected/Short shipments/ warranty/guarantee replacements</b>
	<p>In case of any short shipment during initial supply which is subsequently dispatched by the bidder or any guarantee / warranty replacements shall be dispatched on "DDP-Delivered duty paid BHEL stores" basis for imported items and "FOR-BHEL Stores/designated destination" basis for indigenous items.</p>

41	<b>Export Administration Regulations</b> If a delivery includes such technology and / or supply that is subjected to the export regulations the bidder shall obtain due permissions, approvals, license etc.
42	<b>Force Majeure</b> The bidder shall not be considered in default if delay occurs due to causes beyond their control such as Acts of God, Natural calamities, Fire, Frost, Flood, Civil War, civil commotion, riot, Government Restrictions. Only those causes that have duration of more than seven days shall be considered cause of force majeure. Notification to this effect duly certified by local chamber of commerce/statutory authorities with supporting documents shall be given by the bidder to BHEL by registered letter/courier service immediately without loss of time. In the event of delay due to such causes the delivery schedule shall be extended for a length of time equal to the period of Force Majeure or at the option of BHEL the order may be cancelled. Such cancellation would be without any liability whatsoever on the part of BHEL. In the event of such cancellation the bidder shall refund any amount advanced or paid to the bidder by BHEL and deliver back any material issued to him by BHEL and release facilities, if any provided by BHEL.
43	<b>Non-waiver of Defaults</b> If any individual provision of the contract is invalid, the other provisions shall not be affected.
44	<b>Settlement of Disputes</b> Except as otherwise specifically provided in the contract, all disputes concerning questions of the facts arising under the contract, shall be decided by the Buyer, subject to written appeal by the bidder to the buyer, whose decision shall be final. Any disputes of differences shall to the extent possible be settled amicably between the parties thereto, failing which the disputed issues shall be settled through arbitration The bidder shall continue to perform the contract, pending settlement of disputes(s).
45	<b>Conciliation clause</b> CONCILIATION CLAUSE FOR CONDUCTING CONCILIATION PROCEEDINGS UNDER THE BHEL CONCILIATION SCHEME, 2018: The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the agreement, contract or the Memorandum of Understanding, penalty deduction, time extension), which the Parties are unable to settle mutually, arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Procedure in <a href="http://www.bhel.com/index.php/story_details?story=2454">http://www.bhel.com/index.php/story_details?story=2454</a> . The Procedure together with its Formats will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in this ITB
46	<b>ARBITRATION</b> 46.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 45 herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to IAMC (International Arbitration and Mediation Centre, Hyderabad) and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the IAMC Rules. 46.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to IAMC. The Notice shall be addressed to the Head of the Unit, BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any. 46.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to IAMC and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged. 46.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules. 46.5 The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be Hyderabad. 46.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Hyderabad. 46.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor. 46.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the

	<p>value of the dispute is less than Rs. 10 Crores.</p> <p>46.9 In case the disputed amount Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.</p> <p>46.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause 46.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.</p> <p>In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs &amp; Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14-12-2022 as amended from time to time.</p>															
47	<b>Applicable Laws and jurisdiction of Courts</b> <p>This contract shall be governed by the Law for the time being in force in the Republic of India. Subject to clause 46 of this contract, the Civil Court having original Civil Jurisdiction at Hyderabad, shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract."</p>															
48	<b>BHEL-Fraud prevention policy shall be adhered to.</b> <p>The Bidder along with its associate/ Collaborators/ Sub-contractors/ sub-bidders/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention policy displayed on BHEL Website <a href="http://www.bhel.com">http://www.bhel.com</a> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice. List of nodal officers is hosted on BHEL Hyderabad website <a href="https://hpep.bhel.com/">https://hpep.bhel.com/</a>.</p>															
49	<b>Suspected Cartel Formation</b> <p>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 .</p>															
50	<b>Treatment of cases regarding conflict of interest:</b> <p>The bidder notes that a conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations:</p> <ul style="list-style-type: none"><li>i) If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly;</li><li>ii) The bidder (or his allied firm) provided services for the need assessment/procurement planning of the Tender process in which it is participating;</li><li>iii) Procurement of goods directly from the manufacturers/ suppliers shall be preferred. However, if the OEM/ Principal insists 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. In case bids are received from both the manufacturer/supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorized distributor (with/ or without the OEM) from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate.</li><li>iv) A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a subcontractor in more than one bid if he is not bidding independently in his own name or as a member of a JV. The Bidder declares that they have read and understood the above aspects, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. 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.</li></ul> <p><b>In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/guidelines.</b></p>															
51	<b>Escalation Matrix</b> <table border="1"><thead><tr><th>Details</th><th>Name</th><th>Contact Number</th></tr></thead><tbody><tr><td>Authorised representative</td><td></td><td></td></tr><tr><td>Technical In-charge</td><td></td><td></td></tr><tr><td>Finance and Taxation</td><td></td><td></td></tr><tr><td>Escalation for above</td><td></td><td></td></tr></tbody></table>	Details	Name	Contact Number	Authorised representative			Technical In-charge			Finance and Taxation			Escalation for above		
Details	Name	Contact Number														
Authorised representative																
Technical In-charge																
Finance and Taxation																
Escalation for above																

<b>52</b>	<b>Grievance Redressal Mechanism</b>
	<p>To promote transparency and ensure fair treatment of all bidders, a structured Grievance Redressal Mechanism is in place to address any concerns or issues arising during the tendering process or in subsequent business dealings with the company. Suppliers/Contractors are requested to follow the below escalation process for grievance resolution:</p> <p>1. First Level: Any grievance should initially be addressed to the designated Dealing Officer, whose contact details are provided in the Notice Inviting Tender (NIT)/Contract.</p> <p>2. Second Level: If the issue remains unresolved, it may be escalated by lodging a formal grievance through the SUVIDHA Portal: <a href="https://suvidha.bhel.in/suvidha/">https://suvidha.bhel.in/suvidha/</a>. Responses will be provided in accordance with the defined escalation matrix.”</p>

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

( Attachment to Enquiry No. XXXXXXXXXX Due on Date XX.XX.XXX Special Conditions of Contract ( SCC ) Rev 01					
Sl.No	ITB Clause No.	Clause	Available Options	BHEL requirements	Bidder response
1	3	Mode of Submission	Conventional / E-Procurement		
2	5	Type of Bid	Single part / Two Part / Three Part		
3	6	Indigenous purchase - Destination	BHEL, RCPuram, Hyderabad / Site		
4			Destination in case of Site		
5		Mode of Shipment	Air / Sea		
6		Imports purchase - Destination	Mumbai / Navasheva / Hyderabad / Others		
7		Freight	Customer / BHEL / Vendor		
8		Insurance	Customer / BHEL / Vendor		
9	9	Basic Custom Duty	Project Imports/ Concessional Duty / Merit Duty / Nil / Others Duty Structure		
10	8	Price validity	days		
11	18	Optional Spares price validity	Months / years from the date of		
12	Others	Delivery Period	weeks / Months ( Staggered delivery to be detailed )		
13		Evaluation basis	Itemwise / Total		
14	9	Quantity Split	Splittable / Non-Splittable		
15		(Tabulation for splitting to be detailed )			
16	9	Price Variation Clouser (PVC)	Applicable / Not applicable		
17	12	Payments Terms	Inland Letter of Credit (ILC) In case Bidder opts for ILC Payment, the LC Usance period shall be 120 days with all charges to bidder's account and loading of 0.50%. Note : Wherever it is felt commercially prudent to include Inland Letter of Credit (ILC) payment term, a separate note, before publishing tender, with proper justification for inclusion of ILC payment terms to be concurred by Head of Finance and approved by Product/Functional Head (not less than GM).		
18		Tender cost	Applicable / Not applicable		
19		Earnest Money Deposit (EMD)	% of tender value / Not applicable		
20		E & C Supervision Charges	Applicable / Not applicable		
21			If applicable , max 2% of Total contract value .		
22		Bank Guarantee against milestone payment	(If envisaged to be detailed with % )		
23	Others	Contract execution Bank Guarantee	% of PO Value to be submitted after receipt of PO / Not Applicable		
24	17	Performance Bank Guarantee			
25	7	Additional documentation for payment	Test / Warranty / Guaranty / O&M Manual etc.,		
26	13	Max Penalty applicable on	Delayed portion / Order value		
27	Others	Contract Specific Penalty Clause	including Documentation delay , Performance , E&C etc., to be detailed , considering Project , Unit , Set , etc.,		
28		Guarantee / Warranty Period	Applicable Clause a/b/c		
29		Contract Specific Guarantee / Warranty Period	Specific period if any to be detailed		
30		Expected commissioning period	months from the date of supply		
31		Detailed Billing Breakup (BBU)	Applicable / Not applicable		
32			(If applicable , Bidder shall provide detailed billing break-up in respect of the major items/components (stipulated in the tender) as part of offer .)		
33	Others	Customer approval of vendor	Applicable / Not applicable		
34		Drawing approval	Applicable / Not applicable		
35		QAP approval	Applicable / Not applicable		
36	36	Inspection by	BHEL / BHEL TPI / Vendor TPI / Customer		
37	Others	Financial / Commercial PQC	Applicable / Not applicable		
38			if Applicable to be detailed		

Note:

Special Conditions of Contract (SCC) shall be got approved by the Checklist approving authority, for all tenders.

### Annexure-I

Major Activity timelines shall be considered for indigenous purchases

S No	Activity	Agency	Timeline
1	PO acknowledgement	Vendor	_____ days from PO
2	Submission of Drawings and QP	Vendor	_____ days from PO
3	Approval of Drawings and QP	BHEL/Customer	_____ days from PO
4	Raising of Inspection Call	Vendor	_____ days from PO
5	Inspection completion	Self/BHEL/Third party inspection agency	_____ days from inspection call date
6	Despatch Instructions	BHEL	_____ days from inspection report
7	Receipt of Material	Vendor	_____ days from Despatch instructions

Above is illustrative only. Purchase department can add more activities depending on nature of product/contracts

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

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

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

**ANNEXURE-II**

**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 Suppliers.
- E. **“Intended Purpose”** means the purpose for which the Technical Information is provided to the supplier under or in connection with a contract.
- F. **“Improvement”** includes any modification made to, or adaptation of, the Technical Information which enhances or is calculated to enhance the performance (Whether in terms of effectiveness or in terms of efficiency or both) of the product and / or the service to be provided by the Supplier under a Contract.

2. This Agreement shall come into force / deemed to have come into force, as the case may be, on the Effective Date; or, on the first date when the Technical Information or any part thereof is provided by BHEL to the supplier; whichever is earlier.

3. **Agreement deemed to be incorporated in each contract:** Unless and to the extent otherwise stipulated in the Contract, the conditions of this Agreement are deemed to be incorporated in all Contracts which may be entered into between the Company and the Supplier. Further, unless otherwise stipulated, the obligations under this Agreement are and will be independent of the obligations under the Contracts and such obligations of the Supplier hereunder will remain of full effect and validity notwithstanding that the period of validity of the Contract has expired by efflux of time stipulated therein; or, the contract has been discharged by performance or breach; or, the termination of the Contracts for any reason whatsoever.

**4. Ownership:**

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

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

4.3 Neither party is obligated by or under this Agreement to purchase from or provide to the other party any service or product and that any such purchase / sale of any product and / or service by one party to the other party will be governed by the Contract if any, that may be entered into by and between the Company and the Supplier.

4.4 The Supplier is / has been made well aware and acknowledges that the Technical Information being / which may be shared with it by the Company has been either generated by the Company by incurring huge investment and cost or obtained from foreign collaborators under Technical Collaboration Agreement (TCA) with stringent confidentiality conditions.

4.5 The supplier agrees and undertakes to adhere to confidentiality requirements as applicable to BHEL under a TCA and also ensure that the confidentiality requirements are adhered to by all its concerned employees or sub-contractors /suppliers (where permitted to be engaged by BHEL). Any damages, losses, expenses of any description whatsoever, arising out of or in connection with a breach of the confidentiality requirements under a TCA owing to any act or omission on the part of the supplier or its employees or sub-contractors / suppliers that is claimed by a foreign collaborator from the Company shall be wholly borne by the Supplier and it shall keep BHEL fully indemnified in this behalf. The demand by the Company shall be conclusive upon the Supplier who shall thereupon forthwith pay to the Company without demur, dispute or delay the amount as demanded without demanding any further proof thereof.

4.6 The Supplier agrees and undertakes that unless so decided and advised by the Company in writing all rights / title to any Improvement to the Technical Information shall vest in the Company. The Supplier undertakes and agrees to inform forthwith to the Company of any such Improvement made to the Technical Information and transfer all drawings / documents or other materials connected with such Improvement to the Company and also agrees to fully cooperate with the Company for protecting the Company's interests in such Improvements

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

## **5. Use and Non – Disclosure:**

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

5.2 The Supplier undertakes and agrees that the Technical Information in its possession shall be held in strict confidence and will be used strictly in accordance with this Agreement and solely for the Intended Purpose under the Contract. Use of the Technical Information for any other purpose other than Intended Purpose is prohibited.

5.3 In particular, the Supplier shall not use Technical Information or any Improvement in its possession for the manufacture or procurement of the product(s) or components or parts thereof or use the Technical Information or any portion thereof or any modification or adaptation thereof in any form to provide any product and / or service to any third party, without the prior written consent of the Company.

5.4 The Supplier shall not disclose any of such Technical Information to any third party without the prior written consent of the Company. The Supplier agrees that without prior written consent of the Company, the supplier shall not disclose to a third party about the existence of this Agreement, or of the fact that it is / was in possession of or has experience in the use of any Technical Information nor shall the Supplier share in any manner whatsoever, with a third party, the name or details of any Contract(s) awarded by the Company to it or performed by the Supplier or the scope of work thereof or share any document or correspondence by and between the Company and the supplier in or in connection with this Agreement or such Contract(s). Notwithstanding what is stated elsewhere, the overall responsibility of any breach of the confidentiality provisions under this Agreement shall rest with the Supplier.

5.5 This Supplier undertakes and agrees not to make copies or extracts of and not to disclose to other any or all of the Technical Information in its possession, except as follows:

(a) The Supplier may disclose the Technical Information to such of its officers and employees strictly to the extent as is necessary for such officer or employee for the Intended Purpose, provided that the Confidential Information (or copies thereof) disclosed shall be marked

clearly as the confidential and proprietary information of Company and that such officers and employees shall similarly be bound by undertakings of confidence, restricted use and non-disclosure in respect of the Technical Information. The Supplier shall be responsible for any breach of such confidentiality provisions by such officers and employees.

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

## **6. Exceptions:**

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

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

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

## **8. Warranties & Undertakings:**

- a) The Supplier undertakes to ensure the due observance of the undertakings of confidence, restricted use and non-disclosure by its persons to whom it discloses or releases copies or extracts of the Technical Information.
- b) The Supplier shall keep the Technical Information or improvement made therein properly segregated and not mix up the same with any other material / documents belongings to him / it or to any other third party.
- c) The Supplier further undertakes that he / it shall not hypothecate or give on lease or otherwise alienate or do away with any of the Technical Information and / or equipment of the Company, made available to him / it, and undertakes that he / it shall hold the same as a trustee, in capacity of custodian thereof and use / utilise the same solely for the purpose of executing the contract awarded by the Company.
- d) The Supplier further undertakes that he / it shall return all the equipment and / or Technical Information as far as practicable in the same condition in which the same was made available to him / it by the Company together with any Improvement thereon and the documents connected with such Improvement, to the Company forthwith upon completion of the scope of work or contract for which such Technical Information was provided by the Company to it or as directed by the Company together with a confirmation by way of an affidavit or in such manner as directed by the Company that it has not retained any equipment and / or Technical Information / improvement thereof. In case any such equipment and / or Technical Information or thereof shall remain in his possession or is not capable of being returned, the retention and use of such Technical Information or improvement thereto shall continue to be governed by this Agreement.
- e) The Supplier undertakes to indemnify the Company for all the direct, indirect and / or consequential losses, damages, expenses whatsoever including any consequential loss of business, profits suffered by the Company owing to breach by the Supplier of its obligations under this Agreement and / or the confidentiality requirements, if any, contained in the Contract and that the Supplier hereby agrees that the decision of the Company in all such or any such matter/s shall be final and binding on the Supplier. On mere written demand of the Company, the Supplier shall forthwith and without demur or delay pay to the Company any such sum as determined by the Company as the amount of loss or damage or expense which has been suffered by the Company. The Supplier agrees that the Company shall be entitled to withhold and appropriate any amount payable to the Supplier under any Contract then existing between the Company and the Supplier, in case the Supplier fails to make payment, in terms of the written demand, within 7 days thereof. Without prejudice to the forgoing actions, in respect to any breach of this Agreement, the Company shall be entitled to take

any other action against the Supplier as per applicable laws, the Contract, Company's applicable policies, guidelines rules, procedures, etc.

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

#### **10. Arbitration & Conciliation:**

Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, penalty deduction, validity or execution of the Contract; time extension, or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration . Sole arbitrator to be appointed by Head of the Unit - BHEL, HPEP.

The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties.

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

The seat of arbitration shall be Sangareddy / Hyderabad, Telangana. The language of arbitration shall be English and the documents shall be submitted in English.

The cost of arbitration shall initially be borne equally by the Parties subject to the final apportionment of the cost of the arbitration in the award of the Arbitrator.

Subject to the arbitration in terms of clause 46 of ITB (clause 27 of ATC GeM), the courts at Sangareddy, Telangana State shall have exclusive jurisdiction over any matter arising out of or in connection with this contract.

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

**ARBITRATION FOR CONTRACT WITH 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 commercial contract(s) between Central Public Sector Enterprises (CPSEs/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No 4(1)/2013- DPE(GM/FTS 1835 dated 22-05-2018

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

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

**11. Governing Law & Jurisdiction:**

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

**SIGNATURE**

**WITNESSES**

**1**

**Name:**

**Address:**

**2**

**Name:**

**Address:**

### **Annexure - III**

#### **Proforma for self-certification by Supplier for minimum local content on their letter head for tender value less than Rs 10 Crore**

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

**Auditor's certification with respect to minimum local content on the letter  
head of Statutory Auditor for tender value above Rs.10 crore**

"We \_\_\_\_\_ the statutory auditor of M/s \_\_\_\_\_ (name of the bidder) hereby certify that M/s \_\_\_\_\_ (name of manufacturer) meet the mandatory Local Content requirements of the Goods and/or Services i.e. \_\_\_\_\_ (to be filled as notified in the policy) quoted vide offer No.\_\_\_\_\_ dated \_\_\_\_\_ against BHEL's tender No.\_\_\_\_\_ by M/s \_\_\_\_\_ (Name of the bidder)."

## Annexure - IV

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

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

Sd/-  
Authorised Signatory with Stamp

**Annexure V**

(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>2022-23</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.....

**In case the M/s Bharat Heavy Electricals Limited, HPEP, Ramachandrapuram, Hyderabad is declared as an assessee in default due to any misstatement or incorrect declaration, we indemnify M/s Bharat Heavy Electricals Limited from any ensuing consequences thereunder.**

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  
Ramachandrapuram, Hyderabad  
India - 502032

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.

**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 \_\_\_\_\_

\_\_\_\_\_ (hereinafter referred to as "Contract"). The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

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

**Section 1- Commitments of the Principal**

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
  - 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

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

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

- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

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

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

### **Section 4 - Compensation for Damages**

- 4.1 If the Principal has disqualified the Bidder (s) from the tender process before award / order acceptance according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above , the Bidder(s)/ 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 (to be reckoned from date of bid submission) with any other company in any country conforming to the anti-corruption approach in India that could justify his exclusion from the tender process. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The transgression(s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.
- 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 Suspension 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 a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of Sub-contracting, the Principal Contractor shall be solely responsible for the adherence to the provisions of IP by the sub-contractor(s).
- 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 on receipt of any complaint by them from the bidder(s).
- 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 /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 role of IEM is advisory and the advice of IEM is non- binding on the Organization. However, as IEMs are invariably persons with rich experience who have retired as senior functionaries of the government, their advice would help in proper implementation of the IP.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of the tendering process, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an examination, and submit their joint recommendations to the Management. In case the full panel is not available due to some unavoidable reasons, the available IEM(s) will conduct examination of the complaints. Consent of the IEM(s), who may not be available, shall be taken on record.
- 8.7 The IEMs shall examine all the representations/grievances/ complaints received by them from the bidders or their authorized representative related to any discrimination on account of lack of fair play in modes of procurement and bidding systems, tendering method, eligibility conditions, bid evaluation criteria, commercial terms & conditions, choice of technology/ specifications etc.
- 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.
- 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. 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. If required, the Principal may adopt any mediation rules for this purpose. However, not more than five meetings shall be held for a particular dispute resolution. The fees/expenses on dispute resolution shall be equally shared by both the parties. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as per the terms & conditions of the Contract.

---

For & On behalf of the Principal  
(Office Seal)

Place \_\_\_\_\_  
Date \_\_\_\_\_

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_  
\_\_\_\_\_

---

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

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_  
\_\_\_\_\_

## BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No: .....

Date:

To

NAME

&amp; 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 ..... through its Unit at.....(name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) with its registered office at ..... 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.....dated ..... valued at Rs..... (Rupees -----)/FC.....(in words.....) for ..... (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 ----- (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 the .....bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract/ satisfactory completion of the performance 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.

We .....BANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said 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..... 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 the .....we shall be discharged from all liabilities under this guarantee thereafter.

This Bank Guarantee shall be governed, construed and interpreted in accordance with the laws of India.

Courts at Hyderabad shall alone have exclusive jurisdiction over any matter arising out of or in connection with this Bank Guarantee

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.....
- b) This Guarantee shall be valid up to .....
- c) Unless the Bank is served a written claim or demand on or before \_\_\_\_\_ 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.....

<sup>1</sup> NAME AND ADDRESS OF EMPLOYER i.e Bharat Heavy Electricals Limited

<sup>2</sup> NAME AND ADDRESS OF THE VENDOR/CONTRACTOR/ SUPPLIER

<sup>3</sup> DETAILS ABOUT THE NOTICE OF AWARD/ CONTRACT REFERENCE

<sup>4</sup> CONTRACT VALUE

<sup>5</sup> PROJECT/ SUPPLY DETAILS

<sup>6</sup> BG AMOUNT IN FIGURES AND WORDS

<sup>7</sup> VALIDITY DATE

<sup>8</sup> DATE OF EXPIRY OF CLAIM PERIOD

**Notes:**

1. It is advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Contractor/sub-contractor /vendor/ Bank issuing the guarantee.
3. **In Case of Bank Guarantees submitted by Foreign Vendors-**

**a. From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)**

can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.

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

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

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

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

**Annexure F**

HPEP/CMM/Adani Paints/RC /2026-27					
Special Conditions of Contract ( SCC )			Rev 01		
Sl.No	ITB Clause No.	Clause	Available Options	BHEL requirements	Bidder response
1	3	Mode of Submission	Conventional / E-Procurement	E-procurement	
2	5	Type of Bid	Single part / Two Part / Three Part	Two part	
3	6	Indigenous purchase - Destination	BHEL, RCPuram, Hyderabad / Site	BHEL, RCPuram, Hyderabad	
4			Destination in case of Site		
5		Mode of Shipment	Air / Sea	By road	
6		Imports purchase - Destination	Mumbai / Navasheva / Hyderabad / Others		
7		Freight	Customer / BHEL / Vendor	Vendor	
8		Insurance	Customer / BHEL / Vendor	Vendor	
9	10	<b>Basic Custom Duty</b>	Project Imports/ Concessional Duty / Merit Duty / Nil / Others Duty Structure		
10					
11	18	Price validity	____ days	90 days	
		Optional Spares price validity	____ Months / years from the date of _____		
12	8	Delivery Period	____ weeks / ____ Months ( Staggered delivery to be detailed )	30 days from Individual PO placement against RC	
13	Others	Evaluation basis	Itemwise / Total	Item wise	
14		Quantity Split	Splittable / Non-Splittable	Non-Splittable	
15	12	Quantity Split	(Tabulation for splitting to be detailed )		
16					
17					
18					
19					
20					
21	Others	Price Variation Clouser (PVC)	Applicable / Not applicable	NA	
22	17	Payments Terms	Inland Letter of Credit (ILC) In case Bidder opts for ILC Payment, the LC Usance period shall be 120 days with all charges to bidder's account and loading of 0.50%. Note : Wherever it is felt commercially prudent to include Inland Letter of Credit (ILC) payment term, a separate note, before publishing tender, with proper justification for inclusion of ILC payment terms to be concurred by Head of Finance and approved by Product/Functional Head (not less than GM).	As per ITB	
23	12	Tender cost	Applicable / Not applicable	NA	
24		Earnest Money Deposit (EMD)	____ % of tender value / Not applicable	NA	
25		E & C Supervision Charges	Applicable / Not applicable		
26			If applicable , max 2% of Total contract value .		
27		Bank Guarantee against milestone payment	(If envisaged to be detailed with % )		
28		Contract execution Bank Guarantee	____ % of PO Value to be submitted after receipt of PO / Not Applicable		
29	17	Performance Bank Guarantee		NA	
30	Others	Additional documentation for payment	Test / Warranty / Guaranty / O&M Manual etc.,	Test Certificates	
31		Max Penalty applicable on	Delayed portion / Order value  including Documentation delay , Performance , E&C etc., to be detailed , considering Project , Unit , Set , etc.,	On total order value of Individual PO placed against RC	
32					
33					
34					
35					
36	36	Expected commissioning period	____ months from the date of supply		
37	Others	Detailed Billing Breakup (BBU)	Applicable / Not applicable	NA	
38			(If applicable , Bidder shall provide detailed billing break-up in respect of the major items/components (stipulated in the tender) as part of offer .)		
39	Others			NA	
40					
41	Others	Customer approval of vendor	Applicable / Not applicable	NA	
42		Drawing approval	Applicable / Not applicable	NA	
43	Others	QAP approval	Applicable / Not applicable	NA	
44		Inspection by	BHEL / BHEL TPI / Vendor TPI / Customer	By BHEL	
45	Others	Financial / Commercial PQC	Applicable / Not applicable	NA	
46			if Applicable to be detailed	NA	

# Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## 1. Scope

- 1.1. This document describes the guidelines to be followed by each Unit/ Division/ Region for conducting Reverse Auction (RA) for procurement of material/ works/ services. These guidelines will be applicable for purchases/ contracts to be awarded under Purchase/ Works policy and the RA shall follow the philosophy of English Reverse (No ties).
- 1.2. Based on these guidelines, Units/ Divisions/ Regions (hereinafter referred as 'units') may issue their own Departmental Procedures without changing the intent and spirit of the guidelines contained in this document. These guidelines will supersede earlier guidelines issued vide AA:SSP:RA:05 dated 08.03.2021.
- 1.3. English Reverse (No ties) is a type of auction where the starting price and bid decrement are announced before start of online reverse auction. The interested bidders can thereupon start bidding in an iterative process wherein the lowest bidder at any given moment can be displaced by an even lower bid of a competing bidder, within a given time frame. The bidding is with reference to the current lowest bid in the reverse auction. All bidders will see the current lowest quoted price and their rank. The term 'No ties' is used since more than one bidder cannot give an identical price, at a given instant, during the reverse auction. In other words, there shall never be a tie in the bids.

## 2. Intent of Reverse Auction

To derive maximum benefit in cost savings through competitive bidding.

## 3. Upfront declaration in NIT

- 3.1. Wherever it is felt that procurement may be done through Reverse Auction, the bids shall be invited in two parts/ three parts or single part bid (Price Bid) where Techno-Commercial MoU already exists. Wherever, the evaluation is done for individual line item, separate sealed price bid for each line item shall be taken.
- 3.2. Decision to go for RA would be taken before floating of the tender. In case it is decided to go for RA, same shall be declared upfront in NIT by inserting the following clause:

*"BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on [www.bhel.com](http://www.bhel.com)) for this tender. RA shall be conducted*

# Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

among the techno-commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed price bid along with applicable loading, if any, shall be considered for ranking.”

## 4. Aspects to be considered for RA

4.1. While RA can drive cost savings, they should be used judiciously, considering the broader implications beyond price alone. Therefore, RA should not be used indiscriminately or as a default mode of procurement. One may choose procurement of goods/ works/ services that are amenable to this mode of procurement.

4.2. The cases where RA would not be appropriate are as under:

- a) In Engineered products having complexity in design
- b) Items of strategic/ critical/ vital/ high technical complex nature, items that are in short supply in the market
- c) The requirement is not of high enough value to generate competitive pressures on bidders.
- d) Where the QCBS system of selection is used
- e) Where opting for RA in the tender would bring down competition
- f) EPC contracts and complex Works contracts
- g) Where it is proposed to issue parallel orders by splitting the total order quantity among more than one supplier

4.3. RA shall not be done for selection of business partners through pre-bid/ strategic tie-ups

4.4. If it is decided to go for RA, the following may be considered:

- a) Number of techno-commercially qualified bidders in previous tender for same/ similar class of item
- b) Price volatility of the item(s) under consideration
- c) Past purchase experience of similar item(s)
- d) Tender Value of the item(s) under procurement
- e) Any other aspect which may be specific to tender

Above aspects may be considered by the tender issuing authority to decide before floating of the tender, if RA is to be conducted or not for

# Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

---

that particular tender.

Note: Decision to go for RA or not will be on case to case basis with recorded reasons.

## 5. RA Committee

5.1. Purchase/ Tender committee, if already in place, shall also act as RA committee. Purchase representative will be the convener. In case Purchase/ Tender committee has not been formed, the Product Manager/ MM Head/ Department Head, shall constitute RA committee consisting of representatives (rank as per DoP of tender/ negotiation committee) from departments of Engineering/ Indenter/ User, Purchase and Finance. This committee will work for a specific tender. The role of RA committee shall be as below:

- a) To vet the comparative statement comprising sealed price bids received, MSE status, qualification against Public Procurement (Preference to Make in India), Order 2017 (PPP-MII, Order 2017) of all techno-commercially qualified bidders, loading etc. before sending it to the service provider for RA.
- b) To decide and record the 'Start-Price' and 'Bid Decrement'.
- c) To observe the RA process and declare RA as successful.

## 6. Business rules for RA

6.1. Model Business rules (annexure I) and other annexures II to VI are attached. MM shall prepare and fill in the required details in the annexures at appropriate places like:

- a) Enquiry/ Request for Quotation (RFQ) number
- b) Name and Addresses of the bidders
- c) Items description, quantities/ weight, Specification
- d) Date and time of opening and closing of RA
- e) Extension conditions
- f) Loading Criteria/ Formulae
- g) Foreign Exchange (FE) rates for evaluation
- h) Taxes & Duties
- i) Freight & Insurance
- j) Bidders' training, if required, etc.

# Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

6.2. The calculation sheet e.g. excel sheet (which will help to arrive at 'Total Cost to BHEL') which is communicated to respective bidders of RA, will be prepared by MM and vetted by Finance. This calculation sheet will be finalized based on the evaluation criteria specified in the NIT and will be same based on which sealed price bids have been evaluated.

6.3. MM shall issue a mandate (annexure II) to the service provider covering business rules etc. and inform about event, calculation sheet etc. to all techno-commercially accepted bidders.

## 7. Role of Service Provider

- (1) Acknowledge the receipt of mandate from BHEL.
- (2) Contact the bidders, provide business rules and train them, as required.
- (3) Get the process compliance form (annexure III) signed by all the participating bidders before RA event.
- (4) Conduct the event as per the contract and business rules.
- (5) Submit the Login Reports, Results, History sheet and authorized final bid from the bidders.
- (6) To obtain price breakup from successful bidder and submit the same to BHEL.

## 8. Start Price

Start price for RA shall be lowest of sealed price bid.

Note: Wherever more than one lowest sealed price bids are identical, RA committee shall declare the start price by reducing the lowest sealed price bid by maximum of one decrement.

## 9. Witnessing Auction

Access to witness the RA shall be available to the concerned officials of BHEL (Indenter/ Finance Officials/ Purchase Officials), nominated by Head MM/ Purchase/ Contracts.

## 10. Reverse Auction Process

10.1. Reverse Auction will be conducted if two or more bidders are techno-commercially qualified.

## Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

10.2. Wherever RA is opted in a tender, the techno-commercially qualified H1 will not be allowed to participate in RA. In case more than one H1 bidder quote the same rate, the Price Offer received last, as per the time log of the Portal, shall be removed first, on the principle of last in, first out by the system.

10.3. However, H1 will be allowed to participate in RA in the following cases:

- a) If number of techno-commercially qualified bidders are only 2 or 3.
- b) In case Primary product of only one OEM is left in contention for participation in RA on elimination of H1.
- c) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE lowest bidder.
- d) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII lowest bidder.

10.4. Only those bidders who submit the online sealed bid within the scheduled time shall be eligible to participate further in the RA process.

10.5. The lowest bidder in sealed price bid shall be shown as current L1 automatically by the system. System shall have the provision to indicate this bid as current L1 for further bidding. This price can be displaced by an even lower bid of a competing bidder.

10.6. If the start price is lower than the lowest sealed price bid (in line with clause 8.0), on acceptance of such start price by any bidder this bid would be indicated as current L1 for further bidding. However, if no bidder accepts the start price, RA shall be treated as cancelled for the respective line item(s) and the tender shall be processed accordingly.

10.7. In case of no further bidding, RA will be deemed to have been successful with current L1 bidder. During RA, all bidders will see their rank and current L1 price on the screen. Once the RA is done, the ranking status would be based on the last quoted price of the bidder(s) irrespective of the quote received in RA or sealed price bid.

# Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

---

10.8. No bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.

## 11. Processing of case after RA

11.1. Wherever the evaluation is done on total cost basis, after Reverse Auction, prices of individual line items shall be reduced on pro-rata basis.

11.2. Reasonability of rates received through RA to be ascertained as per extant Policy provisions.

## 12. Payment to the Service Provider

Payment shall be made as per the agreed terms of the Framework Agreement with the service provider based on the mandate issued and service provider's invoice certified by the respective MM. If the RA event is conducted as per the mandate given by BHEL and agreed procedure, payment shall be made to the service provider irrespective of the auction outcome.

## 13. Others

13.1. If RA is being conducted for multiple line items and L1 is to be decided for individual items, number of items in single screen be restricted to 10 (ten) to avoid scrolling by the bidders.

13.2. In case of enquiry through e-Procurement, the sealed electronic price bid (e-bid) is to be treated as sealed envelope price bid.

13.3. BHEL will inform bidders the details of service provider who will provide business rules, all necessary training and assistance before commencement of online bidding.

13.4. Bidders will be advised to read the 'Business Rules' indicating details of RA event carefully, before reverse auction event.

13.5. Model annexures are enclosed. However, to suit specific requirement of the Units changes in the annexures may be done with the approval of respective MM Head of Unit. Such changes shall specifically be communicated to the service provider before the RA event.

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Business Rules for Reverse Auction

## Annexure – I

---

This has reference to tender no **{tender number....date...}**. BHEL shall finalise the Rates for the supply of {item name} through Reverse Auction mode. BHEL has made arrangement with M/s. {Service provider}, who shall be BHEL's authorized service provider for the same. Bidders should go through the instructions given below and submit acceptance of the same.

The technical & commercial terms are as per (a) BHEL Tender Enq. No. {...} dated {...}, (b) Bidders' technical & commercial bid (in case of two part bid) and (c) subsequent correspondences between BHEL and the bidders, if any.

### **1. Procedure of Reverse Auctioning**

- i. Price bids of all techno-commercially qualified bidders shall be opened.
- ii. **Reverse Auction:** The 'bid decrement' will be decided by BHEL.
- iii. The lowest bidder in sealed price bid shall be shown as current L1 automatically by the system and no acceptance of that price is required. System shall have the provision to indicate this bid as current L1.
- iv. Bidders by offering a minimum bid decrement or the multiples thereof can displace a standing lowest bid and become "L1" and this continues as an iterative process. However, no bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.
- v. After the completion of the reverse auction, the Closing Price shall be available for further processing.
- vi. Wherever the evaluation is done on total cost basis, after Reverse Auction, prices of individual line items shall be reduced on pro-rata basis.

2. **Schedule for reverse auction:** The Reverse Auction is tentatively scheduled on {date}: ;{start time}: ;{Close Time: }.
3. **Auction extension time:** If a bidder places a bid in the last {...} minutes of closing of the Reverse Auction and if that bid gets accepted, then the auction's duration shall get extended automatically for another {...} minutes,

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Business Rules for Reverse Auction

### Annexure – I

---

for the entire auction (i.e. for all the items in the auction), from the time that bid comes in. Please note that the auto-extension will take place only if a bid comes in those last {...} minutes and if that bid gets accepted as the lowest bid. If the bid does not get accepted as the lowest bid, the auto-extension will not take place even if that bid might have come in the last {...} minutes. In case, there is no bid in the last {...} minutes of closing of Reverse Auction, the auction shall get closed automatically without any extension. However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the auto-extension period to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc.

The above process will continue till completion of Reverse Auction.

Complaints/ Grievances, if any, regarding denial of service or any related issue should be given in writing thru e-mail/ fax to M/s. {Service provider} with a copy to BHEL within 15 minutes prior to initial closing time of Reverse Auction.

4. **Bid price:** The Bidder has to quote the {...} Price inclusive of Packing & Forwarding charges, all the routine & type tests as per tender scope, taxes, duties, freight and insurance as specified in tender document, including loading (if indicated by BHEL due to deviations in technical/commercial terms) for the Items specified. Details are as shown in Excel Sheet for calculation of total cost to BHEL (To be specified by Unit as per NIT conditions).
5. **Bidding currency and unit of measurement:** Bidding will be conducted in Indian Rupees per Unit of the material as per the specifications {...}

In case of foreign currency bids, exchange rate (TT selling rate of State Bank of India) as on scheduled date of tender opening (Part-I bid) shall be considered for conversion in Indian Rupees. If the relevant day happens to be a Bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken.

6. **Validity of bids:** Price shall be valid for {... days} from the date of reverse auction. These shall not be subjected to any change whatsoever.

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Business Rules for Reverse Auction

### Annexure – I

---

7. **Lowest bid of a bidder:** In case the bidder submits more than one bid, the lowest bid at the end of Reverse Auction will be considered as the bidder's final offer to execute the work.
8. Unique user IDs shall be used by bidders during bidding process. All bids made from the Login ID given to the bidders will be deemed to have been made by the bidders/ bidders' company.
9. **Post auction procedure:** BHEL will proceed with the Lowest Bid in the Reverse Auction for further processing.
10. Any commercial/ technical loading shall be separately intimated to respective bidders prior to RA. The excel sheet provided in this regard shall cover all these aspects. Commercial/ technical loading if any, shall be added by the respective bidder in its price during Reverse Auction. Modalities of loading & de-loading shall be separately intimated to the bidders. The responsibility for correctness of total cost to BHEL shall lie with the bidders.
11. Reverse auction shall be conducted by BHEL (through M/s {Service Provider}), on pre-specified date, while the bidders shall be quoting from their own offices/ place of their choice. Internet connectivity shall have to be ensured by bidders themselves.

During the RA process if a bidder is not able to bid and requests for extension of time by FAX/ email/ phone then time extension of additional 15 minutes will be given by the service provider provided such requests come before 5 minutes of auction closing time. However, only one such request per bidder can be entertained.

In order to ward-off contingent situation of connectivity failure bidders are requested to make all the necessary arrangements/ alternatives whatever required so that they are able to circumvent such situation and still be able to participate in the reverse auction successfully. Failure of power or loss of connectivity at the premises of bidders during the Reverse auction cannot be the cause for not participating in the reverse auction. On account of this, the time for the auction cannot be extended and neither BHEL nor M/s. {Service provider} is responsible for such eventualities.

---

## Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

### Business Rules for Reverse Auction

### Annexure – I

---

**12.** Proxy bids: Proxy bidding feature is a pro-bidder feature to safe guard the bidder's interest of any internet failure or to avoid last minute rush. The proxy feature allows bidders to place an automated bid in the system directly in an auction and bid without having to enter a new amount each time a competing bidder submits a new offer. The bid amount that a bidder enters is the minimum that the bidder is willing to offer. Here the software bids on behalf of the bidder. This obviates the need for the bidder participating in the bidding process until the proxy bid amount is decrementally reached by other bidders. When proxy bid amount is reached, the bidder (who has submitted the proxy bid) has an option to start participating in the bidding process.

The proxy amount is the minimum amount that the bidder is willing to offer. During the course of bidding, the bidder cannot delete or change the amount of a proxy bid.

Bids are submitted in decrements (decreasing bid amounts). The application automates proxy bidding by processing proxy bids automatically, according to the decrement that the auction originator originally established when creating the auction, submitting offers to the next bid decrement each time a competing bidder bids, regardless of the fact whether the competing bids are submitted as proxy or standard bids. However, it may please be noted that if a manual bid and proxy bid are submitted at the same instant manual bid will be recognized as the L1 at that instant.

In case of more than one proxy bid, the system shall bid till it crosses the threshold value of 'each lowest proxy bid' and thereafter allow the competition to decide the final L1 price.

Proxy bids are fed into the system directly by the respective bidders. As such this information is privy only to the respective bidder(s).

**13.** Bidders are advised to get fully trained and clear all their doubts such as refreshing of Screen, quantity being auctioned, tender value being auctioned etc from M/s {Service provider}.

**14.** M/s. {Service provider}, shall arrange to demonstrate/ train the bidder or bidder's nominated person(s), without any cost to bidders. M/s. {Service provider}, shall also explain the bidders, all the business rules related to the

---

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Business Rules for Reverse Auction

## Annexure – I

---

Reverse Auction. Bidders are required to submit their acceptance to the terms/ conditions/ modalities before participating in the Reverse Auction in the process compliance form as enclosed. Without this, the bidder will not be eligible to participate in the event.

- 15.** Successful bidder shall be required to submit the final prices (L1) in prescribed format (Annexure – VI) for price breakup, quoted during the Reverse Auction, duly signed and stamped as token of acceptance without any new condition (other than those already agreed to before start of auction), after the completion of auction to M/s. {Service provider} besides BHEL within two working days of Auction without fail.
- 16.** Any variation between the final bid value and that in the confirmatory signed price breakup document will be considered as tampering the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings (as available on [www.bhel.com](http://www.bhel.com)).
- 17.** Bidders' bid will be taken as an offer to execute the work/ supplies the item as per enquiry no. {...} dt. {...}. Bids once made by the bidder, cannot be cancelled/ withdrawn and bidder shall be bound to execute the work as mentioned above at bidder's final bid price. Should bidder back out and not execute the contract as per the rates quoted, BHEL shall take action as per extant guidelines for suspension of business dealings (as available on [www.bhel.com](http://www.bhel.com)).
- 18.** Bidders shall be able to view the following on their screen along with the necessary fields during Reverse Auction:
  - a. Leading (Running Lowest) Bid in the Auction (only total price of package)
  - b. Bid Placed by the bidder
  - c. Start Price
  - d. Decrement value
  - e. Rank of their own bid during bidding as well as at the close of auction.
- 19.** BHEL's decision on award of contract shall be final and binding on all the Bidders.
- 20.** BHEL reserves the right to extend, reschedule or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Business Rules for Reverse Auction

## Annexure – I

---

intimation to bidders.

- 21.** BHEL shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause. In such cases, the decision of BHEL shall be binding on the bidders.
- 22.** Other terms and conditions shall be as per bidder's techno-commercial offers and other correspondences, if any, till date.
- 23.** If there is any clash between this business document and the FAQ available, if any, in the website of M/s. {Service provider}, the terms & conditions given in this business document will supersede the information contained in the FAQs. Any changes made by BHEL/ service provider (due to unforeseen contingencies) after the first posting shall be deemed to have been accepted if the bidder continues to access the portal after that time.
- 24.** Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines for suspension of business dealings (as available on [www.bhel.com](http://www.bhel.com)), shall be initiated by BHEL.

## Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

### Mandate to Service Provider

### Annexure – II

#### Ref :

#### Date :

To,

M/s. {Service provider}

Sub: Providing of Services for Reverse Auction.

Ref: No {...} date {...}

Dear Sir,

Please conduct Reverse Auction as per the following details:

- **Scope:** Auction event management with training of BHEL and its bidders.
- Seek process compliance form from all the bidders provided by BHEL before start of RA event. In case of postponement of event to some other date, ensure acknowledgement from each bidder.
- Price: Rs. {.....}/- . No other duties, Taxes, levies etc. except service tax @ {.....}% shall be payable for conducting reverse auction. This price is firm.
- Payment Terms: 100% payment after successful completion of Auction.
- Completion of Auction Process: The auction process shall be deemed to have been successfully completed on receipt and acceptance of final report including hard copy/ email of the final bid with price break up, duly signed by the successful bidder who has participated in the reverse auction. The bill shall be submitted along with the completion report to the undersigned.
- Business Rules of the Reverse Auction are as per Annexure – I.
- The list of bidders with their contact details is given in Annexure – IV. and the details of the item (s) to be Reverse Auctioned are as per Annexure – V.
- Please acknowledge receipt of this letter order and also confirm that final report (duly signed and stamped by M/s. {Service provider}) including hard copy/ email of the final bid with breakup of prices duly signed by the successful bidder (duly endorsed by M/s. {Service provider}) shall be submitted within **four** working days of conclusion of auction.

**Yours sincerely,**

(for and on behalf of BHEL)

## Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

### Mandate to Service Provider

### Annexure – II

#### **Note:**

If the event has been conducted as per mandate, you shall be paid irrespective of RA outcome.

<b>Buyer Name</b>	<ul style="list-style-type: none"><li>- Name of BHEL Unit</li><li>- Full postal address</li><li>- Fax:</li><li>- Phone:</li><li>- Email:</li><li>- Contact person name:</li><li>- Phone:</li><li>-</li></ul>
<b>Auction to be conducted by</b>	<ul style="list-style-type: none"><li>- Name of Service provider</li><li>- Full postal address</li><li>- Fax:</li><li>- Phone:</li><li>- Email:</li><li>- Contact person name:</li><li>- Phone:</li><li>-</li></ul>
<b>Date of Auction</b>	<ul style="list-style-type: none"><li>- Date of Auction</li><li>- Reverse auction time:</li><li>- Auction website:</li></ul>
<b>Documents Attached: (To be sent to the bidders)</b>	<ul style="list-style-type: none"><li>1) Business rules for Reverse Auction (<u>Annexure-I</u>)</li><li>2) Process Compliance Form (<u>Annexure-III</u>)</li><li>3) Details of item (s) to be Reverse Auctioned (<u>Annexure-V</u>)</li><li>4) Post RA Price confirmation by bidder (<u>Annexure-VI</u>)</li></ul>

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## Process Compliance Form

## Annexure – III

**(The bidders are required to print this on their company's letterhead and sign, stamp before RA)**

To

- M/s. {Service provider}
- Postal address}

### **Sub: Agreement to the Process related Terms and Conditions**

Dear Sir,

This has reference to the Terms & Conditions for the Reverse Auction mentioned in the RFQ document for {Items} against BHEL enquiry/ RFQ no.{.....} dt. {.....} This letter is to confirm that:

- 1) The undersigned is authorized official/ representative of the company to participate in RA and to sign the related documents.
- 2) We have studied the Reverse Auction guidelines (as available on [www.bhel.com](http://www.bhel.com)), and the Business rules governing the Reverse Auction as mentioned in your letter and confirm our agreement to them.
- 3) We also confirm that we have taken the training on the auction tool and have understood the functionality of the same thoroughly.
- 4) We also confirm that, in case we become L1 bidder, we will FAX/ email the price confirmation & break up of our quoted price as per Annexure - VI within **two** working days (of BHEL) after completion of RA event, besides sending the same by registered post/ courier both to M/s. BHEL and M/s. {Service provider.}

We, hereby confirm that we will honor the Bids placed by us during the auction process.

With regards

Signature with company seal

Name –

Company / Organization

Designation within Company / Organization

Address of Company / Organization

- **Sign this document and FAX/ email it to M/s {Service provider} at {.....} prior to start of the Event.**

# Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

## List of bidders and their address/ contact person details

### Annexure – IV

---

Sl. No.	Address	Contact Person
1	<ul style="list-style-type: none"><li>- Name of bidder</li><li>- Full postal address</li><li>- Fax:</li><li>- Phone:</li><li>- Email:</li></ul>	<ul style="list-style-type: none"><li>- Contact person name:</li><li>- Phone:</li><li>- Email:</li></ul>
2		
3		
..		
..		

## Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

### Details of item (s) for Reverse Auction

Annexure – V

---

#### 1. {*Details of items including quantity, specification, Enquiry no. & date*

1.

2.

..

..

..

}

## Guidelines for Reverse Auction –2024

Doc. No. AA:SSP:RA:00  
Dated: 05.12.2024

**RA price confirmation and breakup**  
**(To be submitted by L1 bidder after completion of RA)**

**Annexure – VI**

**To**

- M/s. Service provider
- Postal address

CC: M/s BHEL  
{Unit-  
Address-}

Sub: **Final price quoted during Reverse Auction and price breakup**

Dear Sir,

We confirm that we have quoted.

**Rs.{\_\_\_\_ in value & in words \_\_\_\_} for item(s) covered under tender enquiry  
No. {...} dt.{...}**

Total price of the items covered under above cited enquiries is inclusive of {Packing & forwarding, GST, E.D., C.S.T., freight and insurance charges up to {.....} District, {.....} State and Type Test Charges etc., (exclusive of service tax), other as per NIT}

as our final landed prices as quoted during the Reverse Auction conducted today {date} which will be valid for a period of {\_\_\_\_ in nos. & in words \_\_\_\_} days.

The price break-up is as given below.

Total

===== - Rs. in value & in words =====

Yours sincerely,

For \_\_\_\_\_

**Name:**  
**Company:**  
**Date:**  
**Seal:**