Bharat Heavy Electricals Ltd.,
Electronics Division,
Mysore Road, Bangalore – 560 026

Tender Document for Supply with Erection Supervision & commissioning of VCB for ICF CHENNAI -MEMU (Ref. BSV0000049)

TENDER REFERENCE DOC	BSV0000049 dtd: 21.10.2019
TENDER DOCUMENT AVAILABLE FROM	21.10.19 in www.bhel.com & www. eprocure.gov.in
LAST DATE AND TIME FOR SUBMISSION OF TENDER	06.11.2019, 13.00 hrs
DATE AND TIME FOR TENDER OPENING	06.11.2019 13.30 hrs
SUBMISSION OF OFFER	Bidder to submit offer in eps mode only. www.abcprocure.com

This Tender Document Contains documents as per below index:

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REQUEST FOR QUOTATION

MMI:PU:RF:003	BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: BSV0000049 RFQ DATE : 21.OCT.2019	**Due Date** **06.OCT.2019** **Time: 13:00 HRS** .

(for all correspondence)
Purchase Executive : SAVITHA B
Phone : 080 26998653
Fax :
E-mail: savitha@bhel.in

Sl No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	PR0900009729 VCB+AC Earthing switch-MEMU VACUUM CIRCUIT BREAKER (COMPLETE WITH ALL ACCESSORIES & COMPONENTS). Suitable Control mating connector for Auxiliary contacts and power supply (Male & Female Connectors of same make). OTHER ACCESSORIES REQUIRED FOR MOUNTING AND ELECTRICAL CONNECTIONS for VCB. AC Earthing switch compatible with VCB. Other accessories required for mounting and other connections for AC earthing Switch As Per specification : TBSG/ICF/ACMEMU/02/VCB WITH AC EARTHING SWITCH Test Certificate	106	ST	106	As per SCC

Total Number of Items - 1

Refer SCC for the terms and conditions.
Preference will be given to vendors who accepts our standard payment terms .
Please specify Terms of delivery, GST, Ex-BHEL, Ex-works surcharge, Insurance,P&F, Freight and other taxes very clearly .
For evaluation,exchange rate(TT selling rate of SBI) as on scheduled date of tender opening (Part-II bid in case of three part bid) shall be considered.
The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected.The list of banned firms is available on BHEL web site www.bhel.com

i). This is only RFQ not an order.
ii). In all correspondence quote RFQ No. & due date.
iii). In Quotation BHEL material code / RFQ Sl. No. should be mentioned clearly.
iv). Quotation should remain valid for a minimum peiod of 90 days from the date of TBO.
v). In case of non-receipt of Quotation or regret letter for 3 consecutive RFQs you are liable to be removed from our vendors list.
vii). All Prices should be written in words and numbers.

For and On behalf of BHEL.

1.0 Pre-Qualification Criteria: **With respect to BHEL Technical specification TBSG/ICF/ACMEMU/02/VCB WITH AC EARTHING SWITCH**

1.1 The bidder should be a manufacture/supplier of Vacuum Circuit Breaker with AC earthing switch for the Rolling stock application of Indian Railways for 3 phase IGBT based AC EMU/MEMU or 3 Phase IGBT based Locomotives or Metros rails.

1.2 The bidder should have manufactured 30 sets of this equipment which are in use successfully for a period of minimum 02 years on any Railway system in last 05 years, excluding the year of bid opening.

1.3 The product should have valid type test certificate complying to relevant IEC (latest) and other standards mentioned in the Technical Specification TBSG/ACMEMU/02/VCB WITH AC EARTHING SWITCH for rolling stock application on the date of submission against the tender. The vendor shall fully comply with the type and routine test clause mentioned in the technical specification TBSG/ACMEMU/02/VCB WITH AC EARTHING SWITCH. The Purchaser has the right to ask to repeat the type tests either partially or fully if required without any price implication to BHEL

1.4 If the Bidder is not having the required vendor approval from RDSO/ICF/RCF/MCF for supply of the product, the bidder shall approach RDSO/ICF/RCF/MCF with their technical offer and get the approval within 45 days from the date of tender opening. If approval is not received within the above period, BHEL shall treat the offer is techno commercially not acceptable for this tender and offer shall be rejected. Customer approval certificate received from bidder after the due date will be considered for our future requirements. This Criteria is not applicable to the bidder who is already a RDSO/ICF/RCF/MCF approved supplier for the product. However, the technical /commercial offer will be evaluated based on the specification of this tender by the purchaser for suitability at his discretion.

2.0 DOCUMENTS TO BE SUBMITTED.

All the relevant documents proof for points referred in 1.0 shall be submitted along with the tender.

Rev.00		**Approved:** Shekar.R		
		Prepared: David J	**Issued:** TE	**Date:** 29.08.2019

BHARAT HEAVY ELECTRICALS LIMITED
TRANSPORTATION BUSINESS & SYSTEMS GROUP,
INDUSTRY SECTOR, LODHI ROAD, NEW DELHI

DOCUMENT No	**TBSG/ICF/ACMEMU/02/ VCB WITH AC EARTHING SWITCH**	Rev. No.	**00**	Prepared	Checked	Approved
TYPE OF DOC.	**TECHNICAL SPECIFICATION**		NAME	**Abhideep**	**Prafful Lakra**	**A. K Yadav**
TITLE **VACUUM CIRCUIT BREAKER WITH COMPATIBLE AC EARTHING SWITCH**			SIGN			
			DATE	21.09.19		
			GROUP	TBSG		

CUSTOMER/ CONSULTANT	**BHEL/INDIAN RAILWAYS**
PROJECT	**DESIGN, DEVELOPMENT, MANUFACTURE, SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 25kV IGBT BASED THREE PHASE ELECTRICS (ON BOARD MOUNTED) FOR AC MEMU**

TECHNICAL SPECIFICATION

VACUUM CIRCUIT BREAKER WITH COMPATIBLE AC EARTHING SWITCH

Rev No.	**Date**	**Altered**	**Checked**	**Approved**	**REVISION DETAILS**

Distribution	**To** **Copies**	*Office Copy*	*TSG-MM*			

Table of Contents:

SECTION – 1

SCOPE, QUANTITIES & ELIGIBILITY

1.1 SCOPE

This technical specification covers the requirements of design, manufacture, testing at works, packing and dispatch of **VACUUM CIRCUIT BREAKER AND COMPATIBLE AC EARTHING SWITCH.**

The equipment is required for the following project.

Name of the customer : BHEL/INDIAN RAILWAYS

Name of the Project : DESIGN, DEVELOPMENT, MANUFACTURE, SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 25kV IGBT BASED THREE PHASE ELECTRICS (ON BOARD MOUNTED) FOR AC MEMU.

The scope shall also include the followings:

a. The supply of complete documentation for approval of design, relevant drawings and calculations to the satisfaction of purchaser and RDSO and support documentation associated with the operation and maintenance of the equipment supplied.
b. The supplier shall submit list of equipment and facilities required for maintenance and overhaul of equipment offered.

1.2 BILL OF MATERIAL:

Sl. No.	Description	Qty. per Set (4 Coach Unit)	Remarks
1.	**VACUUM CIRCUIT BREAKER (COMPLETE WITH ALL ACCESSORIES & COMPONENTS)**	**1 No.**	
2.	**OTHER ACCESSORIES REQUIRED FOR MOUNTING AND ELECTRICAL CONNECTIONS**	**As reqd.**	
3.	**Suitable Control mating connector for Auxiliary contacts and power supply (Male & Female Connectors of same make)**	**As reqd.**	
4.	**AC Earthing switch compatible with VCB**	**1 No.**	
5.	**Other accessories required for mounting and other connections for AC earthing Switch.**	**As reqd.**	

Note:- RC damping panels are not required to be supplied by the supplier.

1.3 ELIGIBILITY CRITERIA FOR VCB:

1. The Bidder should be a regular supplier to Indian Railway Projects and should have supplied the offered equipment for Indian Railways projects of 3 phase IGBT Based AC EMU/MEMU/METRO or 3 Phase IGBT based Locomotives or Metros operating in India.

2. The bidder should have manufactured 30 sets of offered equipment which are in use successfully for a period of minimum 02 years on any Railway system in last 05 years, excluding the year of bid opening. The bidders are required to submit only a self-certification in respect to the make and their performance.

1.4 ELIGIBILITY CRITERIA FOR AC EARTHING SWITCH:

1. The Bidder should be a regular supplier to Indian Railway Projects and should have supplied the offered equipment for Indian Railways projects of 3 phase IGBT Based AC EMU/MEMU/METRO or 3 Phase IGBT based Locomotives or Metros operating in India.

1.5 CLAUSE BY CLUASE COMPLIANCE

Vendor to submit clause by clause compliance to complete technical specification along with the technical bid.

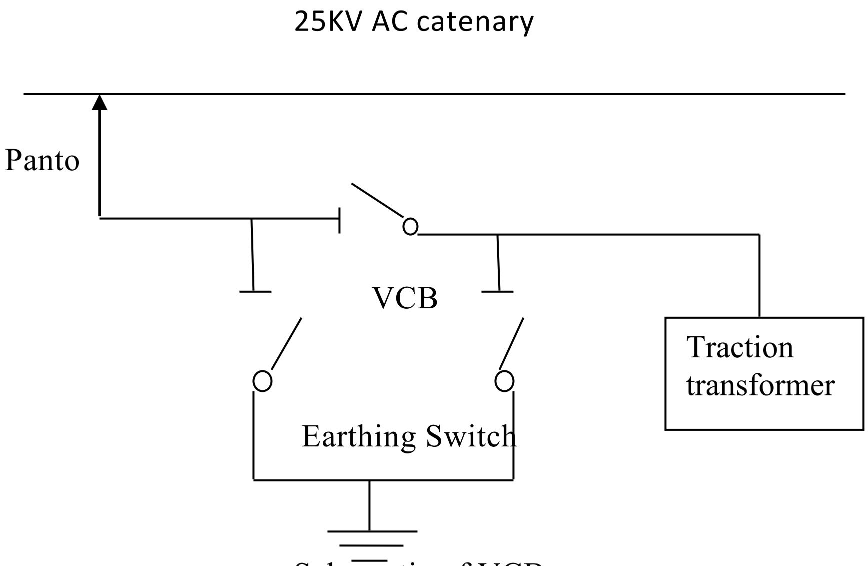
SECTION – 2

STANDARD TECHNICAL SPECIFICATION

2.1 TECHNICAL SPECIFICATION OF VACUUM CIRCUIT BREAKER

The Vacuum Circuit Breaker to be supplied should be according to CLW specification no. CLW/ES/C-47(latest). However, RC damping panels with capacitors are not required to be supplied by the supplier for this MEMU project.

The Vacuum Circuit Breaker is a single pole 25KV AC circuit-breaker equipped with a vacuum interrupter. The vacuum circuit breaker is used as a line circuit breaker to close and open the power circuit of the vehicle from the overhead catenary and to interrupt the power circuit current under overload, short circuit conditions or any other abnormal working conditions defined and implemented to the application.



Schematic of VCB

The equipment shall be suitable for operating on following supply:

i) The operating voltage: 25KV AC power supply
ii) Normal variation: 19 KV to 27.5KV
iii) Occasional maximum (Cut off) : 30 KV
iv) Occasional minimum: 16.5 KV
v) Cut off voltage: 16 KV

vi) Frequency variation: 47 Hz to 53 Hz

The power supply system shall be 25 KV, 50Hz single phase AC, 25 KV being the nominal voltage of the system.

2.1.1 DESCRIPTION

a) VACUUM INTERRUPTER / VACUUM SWITCH TUBE

The vacuum interrupter shall comprise:

(1) One vacuum bottle containing:
   a. Fixed contact (FC)
   b. Moving contact (MC)

(2) Ceramic insulator as a protecting housing.

b) CLOSING DEVICE (ELECTRO-PNEUMATIC)

At the time of start, when EP valve shall be energized, controlled air supplied to the operating cylinder shall initiate movement of main mechanism and thereby control the initial speed of the mechanism travel.

c) HOLDING DEVICE (ELECTRO-PNEUMATIC)

The pneumatic cylinder shall be equipped with an electro-pneumatic valve and the moving part is the piston.

The contacts are held in closed position by air pressure which is maintained by EP valve. There are set of compression springs to store energy during closing operation, which is used while opening the circuit breaker.

d) OPENING CONTROL:

The opening of the VCB shall occur by interruption of the EP coil current thereby closing of compressed air supply and opening through stored energy of the springs.

e) AUXILIARY CONTACTS:

Auxiliary contacts/switch shall consist of fish bone type auxiliary switch, in which 4NO and 4NC contacts are available to the user.

These are operated through the cam drive linked with the main operating rod. The NO contact can be changed to NC and vice versa.

The Auxiliary switch shall be of fishbone type similar to DBTF type breaker which is being currently used in these VCBs and approved by RDSO.

2.1.2 TECHNICAL DETAILS OF VCB:

The technical data of VCB shall be as follows:

S.No.	Parameter	Value
1.	Nominal voltage	25 KV
2.	Rated operational voltage	27.5KV
3.	Maximum Operational voltage	30 KV
4.	Rated power frequency withstand voltage Dry & Wet test	75 KV
5.	Impulse Voltage withstand rating	175 KV peak
6.	Rated operational current	1000 A
7.	Rated operational frequency	50 Hz
8.	Rated short circuit breaking capacity	16 kA
9.	Rated short circuit making capacity	40 kA
11.	Rated duration of Short circuit current	3 Sec.
12.	Opening Time	<=60 ms
13.	Weight	155 Kg (Approx.)
14.	Type of Bottle	Single Interrupter
15.	Control supply voltage	110 V DC
16.	Inlet air pressure to control circuit	5 to 10 kg/cm2
17.	Auxiliary contacts	Fish bone type (4 NO+4 NC)
18.	Compatibility with AC Earthing switch	VCB offered by supplier should be compatible & mechanically matching for direct coupling with RDSO/IR approved AC earthing switch.
19.	Overall dimension, mounting position and cut out dimension	Overall dimension of VCB shall generally be as per drawing in Annexure-1 or Annexure-2. Correspondingly, the mounting position and cut out dimension also shall be same as per drawing in Annexure-1 or Annexure-2. VCB after mounting on the roof, coach layout shall be checked and VCB must be within Maximum moving dimension (MMD).

20	IP standard	IP67 for external portion. IP20 for internal portion.

2.1.3 VACUUM SWITCH TUBE

The supplier shall furnish the detailed technical datasheet and drawings of Vacuum switch tube (VST).
Besides above data/information, the vendor shall furnish the following data:

a) Make and Type, Total fault clearing time, overall dimensions for VST, No. of Maximum electrical operations, Maximum Mechanical operations, Minimum number of electrical operations without replacement of vacuum bottle, Rating of auxiliary contacts, Overall dimensions and weight of equipment.
b) Approved Bill of Material from RDSO/IR.
c) Complete details of electronic control units in VCB, if used, along with circuit diagram, its parameters and other relevant details.
d) Internal circuit diagram of VCB components.
e) Detailed mounting arrangement drawing.
f) Wiring diagram.
g) Reliability Data: - The supplier shall provide the reliability data of equipment, expressed in Mean Time between Failure (MTBF) and Mean Distance between Failure along with calculation and the method of calculation. The MTBF shall be submitted for the ambient temperatures of 45°C, 50°C and 55°C.
h) Any other technical & performance details required by customer (BHEL/ RDSO/ICF/IR) regarding the equipment needs to be furnished.
i) The mounting and fitment of VCB shall be finalized as per RDSO/ICF/IR requirements.
j) All mounting hardware shall be of Stainless steel and shall be supplied along with VCB.
k) In addition to the above mentioned technical requirements, the offered equipment must comply to CLW specification no. CLW/ES/C-47(latest) or any other relevant IECs/other applicable standards.

2.1.4 EQUIPMENT TESTING:

(1) Valid Type test report is to be submitted for the equipment along with offer, if the equipment is already type tested. In case, ultimate customer insists to repeat the type tests due to any reason, the type test shall be conducted again by the supplier, for which test procedure shall also be submitted by the supplier for approval before conducting the type test. In case ultimate customer desires to witness the type tests,

the supplier shall have no objection. The supplier is required to quote for the type test charges if any, separately in commercial offer. These charges will be loaded in the equipment price at the time of final evaluation.

(2) Supplier to submit Routine test certificates and inspection certificate of equipment as per QAP along with equipment.

(3) Type and routine tests shall be conducted as per following standards:

- IEC 60056(1987): With amendments 1 (1992), 2 (1995) and 3 (1996)- High voltage alternating current circuit breakers.
- IEC 60077(1968): Electric equipment for rolling Stock Electro Technical components.
  Part 1: General Rules
  Part 2: Rules for DC Circuit Breakers

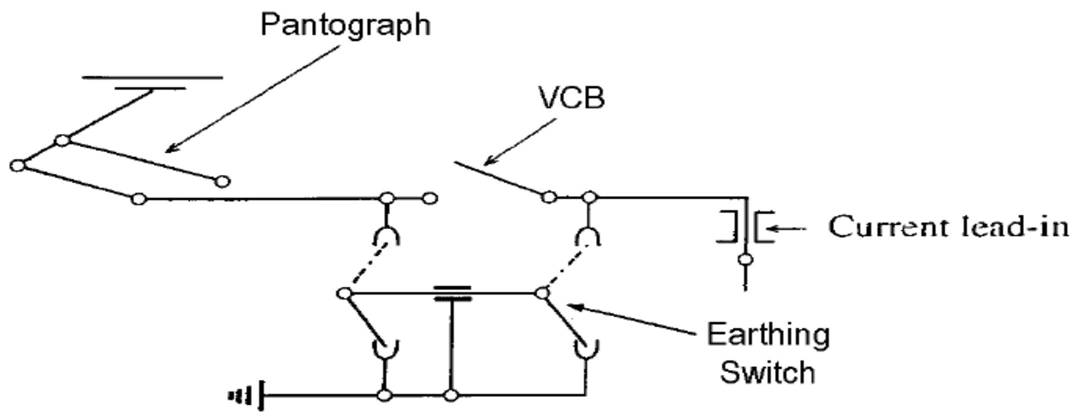
(4) Type and routine test will also confirm to clause 3.11 of section 3 of technical Specification.

2.2 TECHNICAL SPECIFICATION OF AC EARTHING SWITCH

The AC Earthing Switch (ES) is a manual operated device with safety interlocking Keys, designed to ground electrical circuits on both sides of the vacuum circuit breaker. The earthing shall be achieved through two knives connecting together the traction and earthing circuits once the vacuum circuit breaker is open. The AC earthing switch shall be of proven design suitable for transportation application in Indian environmental conditions as attached in Section 3.3 of this specification.

Wiring diagram

The wiring diagram for AC earthing switch shall be as follows:



2.2.1 SYSTEM SPECIFICATIONS NECESSARILY COMPLYING THE FOLLOWING:

Nominal voltage	25 kV
Rated operating voltage	27.5 kV
Highest short time operational voltage	30 kV
Poles	
Weight	27kg (Approx.)
Rated Current	400 A
Place of mounting	Roof
Short time withstand current	16kA rms for 3sec
Peak withstand current	40kA
Key and lock configuration	3 keys (1 Blue +2 Yellow)

a. The OGA of AC earthing switch shall be such that it is compatible for latching with the VCB being offered by the supplier.
b. Mounting of AC Earthing Switch for VCB shall be finalized with ICF/RDSO/IR.
c. The orientation of operating handle (Left or Right side) shall be finalized as per requirement of user Railways.
d. Locking keys, size and make, should be compatible with Panto isolating cock and DC Earthing Switch. The locking key design shall be finalized in conjunction with locking arrangement of Panto-isolating cock and DC Earthing switch which will be supplied by different suppliers.
e. Vendor to conduct the type tests confirming to the CLW specification No. CLW/ES/3/0010, Alt A or latest for Earthing switch of single bottle VCBs.
f. **In addition to the above mentioned technical requirements, the offered equipment must comply to CLW specification no. CLW/ES/3/0010, Alt A or latest and relevant IECs/other applicable standards.**

2.2.2 EQUIPMENT TESTING OF AC EARTHING SWITCH:

(1) **Valid Type test report** is to be submitted for the equipment along with offer, if the equipment is already type tested. In case, ultimate customer insists to repeat the type tests due to any reason, the type test shall be conducted again by the supplier, for which test procedure shall also be submitted by the supplier for approval before conducting the type test. In case ultimate customer desires to witness the type tests, the supplier shall have no objection. The supplier is required to quote for the type test charges if any, separately in commercial offer. These charges will be loaded in the equipment price at the time of final evaluation.

(2) Supplier to submit Routine test certificates and inspection certificate of equipment as per QAP along with equipment.

(3) Type and routine test will also confirm to clause 3.11 of section 3 of technical specification.

2.3 DESIGN REQUIREMENTS TO BE PROVIDED BY SUPPLIER:

• Write-up/ description of each equipment	to be provided by supplier
• Make and type, rated voltage and current, the maximum permissible operating voltage, rated short time current, total fault clearing time, making and breaking capacity, impulse voltage withstands, control circuit voltage, number and rating of auxiliary contacts, overall dimensions and weight of the equipment.	to be provided by supplier
• Circuit diagram, connection & wiring diagram, equipment drawing with mounting details, weights, center of gravity, etc. and any other relevant drawings.	to be provided by supplier
• Datasheets of the Equipments	to be provided by supplier
• Type test protocol & procedure/ Type test reports	Supplier to submit the complete reports of type test already conducted on the proposed/offered equipment. In case type test is required to be done, supplier to submit the detailed test procedures for approval. Supplier to submit Routine test certificates and inspection certificate of equipment as per QAP along with equipment.
• Complete Bill of Material for proven design	to be provided by supplier
• Performance statement	to be provided by supplier in the attached format.
• Performance certificate	to be provided by supplier in the attached format.
• RDSO Approval letter (conforming to the latest RDSO spec as applicable)	to be provided by supplier

• Project specific AUTO CAD drawing-2D and 3D model	to be provided by supplier after order placement
• Project Specific Drawings in A3 size	To be provided by supplier
• Technical Manual	To be provided by supplier
• Installation, Operational and Maintenance Manual	To be provided by supplier
• MTBF/MDBF Data	To be provided by supplier

SECTION – 3

PROJECT DETAILS AND GENERAL SPECIFICATIONS

3 GENERAL

This section stipulates the General Technical Requirements under the contract and will form an integral part of the Technical Specification.

The provisions under this section are intended to supplement general requirements for the materials, equipment and services covered under other sections and are not exclusive.

However, in case of conflict between the requirements specified in this section and requirements specified under other sections, the requirements specified under respective sections shall hold good.

3.1 INSTRUCTION TO BIDDERS

The bidders shall submit the technical requirements, data and information as per the technical specification, provided in Section-2.

The bidders shall furnish catalogues, engineering data, technical information, design documents, drawings etc. fully in conformity with the technical specification. Unless brought out clearly, the Bidder shall be deemed to conform to this specification scrupulously.

3.2 GENERAL DESIGN REQUIREMENTS

i) The traction equipment shall be suitable for operation with 25 KV AC, 50 Hz supplied by overhead contact wires. In case of MEMUs, the control equipment shall be suitable to permit multiple operation up to 24 coach formation of 06 basic units here each basic unit shall comprise of 01 (one) motor coach and 03 associated trailer coaches.

ii) The equipment design shall incorporate all essential features necessary to yield high traffic use, low maintenance requirements, easy maintainability, high reliability in operation and high efficiency with low Specific Energy Consumption (SEC).

iii) The stock fitted with the supplied equipment shall meet the operating/service conditions and performance requirements as specified in section 3.3 Ambient conditions/operating conditions of this specification respectively and shall be suitable for varying loading conditions.

iv) The entire equipment shall be designed to ensure satisfactory and safe operation under the running conditions specified in section 3.3 Ambient conditions/operating conditions and especially under sudden variations of load and electric pressure as may arise under working conditions due to faulty operation and short circuits. The design shall also facilitate erection, inspection, maintenance and replacement of the various units comprising the equipment.

v) All working parts of the control and auxiliary circuit specifically electronics and PCBs, shall be suitably covered in cubicles with essential interlocks/keys to keep them free from moisture and dust. As a minimum, equipment shall be sealed to the standard below:

    a. Under frame mounted equipment (except traction motor) IP65.
    b. Equipments mounted inside the car body IP54.

   The protection level (IP level) shall be furnished by the supplier during design approval.

vi) All the electrical equipment's shall comply with the latest edition of IEC specifications unless otherwise specified. The temperature rise shall be measured according to the procedure stipulated by IEC and shall comply with the limits specified and the ambient conditions defined in this specification. Specified temperature rise of equipment shall be calculated after taking into account at least 25 % choking of air filters and radiator fins etc.

vii) All equipment's shall be adequately earthed, insulated, screened or enclosed. They shall be provided with essential interlocks and keys as may be adequate to ensure the protection of the equipment and the safety of those concerned with its operation and maintenance.

viii) If applicable, supplier shall study the currently available lubricants/cooling oils in India and employ these as far as possible. Full lubrication scheme and schedule for the equipment shall be submitted. Wherever the imported lubricants or cooling oil are used, Supplier shall study and furnish details of equivalent Indian lubricants/oil.

ix) The equipment shall be designed keeping in view that the EMUs/MEMUs operates with doors and windows wide open.

x) The design shall also facilitate easy erection by means of suitable tools & equipment, inspection, maintenance and replacement of the various units comprising the equipment.

xi) Supplier shall submit 3D models of propulsion & other equipment, cooling system, driver/shunting desk, cab layout and roof/under frame/HT compartment layouts populated with equipment etc.

xii) The design of the equipment shall be based on sound, proven and reliable engineering practices. The equipment used in different sub systems shall be of proven technology and design. The supplier shall submit the supportive document for each of the assembly/sub-assembly for its proven performance under the environmental conditions prevalent in India.

xiii) The supplier shall design the mounting arrangements suitable for coaches to be manufactured by IR. The accessories for mounting the equipment shall be in the scope of supply. The hardware for mounting, safety links for underslung equipment, the termination hardware also will be in the scope of supply all equipment.

xiv) **SOFTWARE (IF APPLICABLE)**

a. Software shall be written in a structured manner and fully documented during all stages of its design and development. This shall meet the requirements of EN 50126-2: Dependability for Guided Transport Systems - Part 2: Safety, EN 50128: Railway Applications: Software for Railway Control and Protection Systems, and EN 50129: Safety related Electronic Railway Control and Protection Systems. Any deviation from this requirement will need approval of RDSO in design stage.

b. Logic of the Software of various sub-systems shall be approved by RDSO in consultation with user railways at the design approval stage. The supplier shall submit the values of parameters, list of fault messages, their environmental data sets, hierarchy of fault display, fault categorization, trouble shooting of each fault, etc. for approval of RDSO. Changes in parameters shall be demonstrated with their effect on results.

c. The supplier shall submit software logic diagrams with detail explanation along with complete software packages to be loaded in train management system before the commissioning of the prototype rake. Parametric changes shall be possible in the software in order to meet future requirements, such as change in acceleration and deceleration, bogie and coach suspension, train configurations, OHE voltage and frequency, etc. While listing out the values of various parameters, the contractor must provide a range within which any change can be made without jeopardizing the functionality of the system.

d. Software shall be fine-tuned through simulations & real life working conditions based on the extensive trials, associating user railways before putting the rake into commercial services. As it requires, instrumentation and expertise of Software Design Professional, software expert (s) of supplier shall be based at the work place along with the commissioning engineers so that all the software related issues are resolved before putting the rake into commercial service.

e. Quality and efficacy of Trouble shooting manual, software tools and software documentation shall be validated during extensive field trials. Final version of these documents shall include the changes required based on the trials and experience of operating railways. This shall be approved by RDSO.

f. All the changes, thereafter, in software shall be approved by RDSO in consultation with user railways before actual implementation and the supplier must give software release which shall include brief description of the problem, logics, explanations, parametric changes etc. to the satisfaction of Railways.

g. Software documentation shall be provided to give the full understanding of the software function and operation. Documentation shall be complete, clear and concise, and include all modifications up to final acceptance. Documentation shall include software block diagram showing signal flow, logic, and hardware interfaces. A top level flow diagram and description of detailed operation shall be provided.

xv) Notwithstanding the contents of this specification, the supplier shall ensure that the equipment supplied by them is complete in all respect so as to enable the desired operation of the MEMU fitted with their equipment.

xvi) The specification has been prepared for the general guidance of the Supplier. Deviation from this specification may be proposed if it intends to improve the performance, utility and efficiency of the MEMU as a whole or part thereof. All such deviations shall be accompanied with complete technical details and justification for the proposed deviation.

3.3 AMBIENT CONDITIONS / OPERATING CONDITIONS

MEMUs are currently running in NR, NER, ER, ECR, SECR, SCR, SWR, SR and NCR etc. These EMUs/MEMUs are operating at 25 kV AC OHE voltage fed through pantograph and vacuum circuit breaker mounted on the roof of the motor coach. The incoming power supply is fed to the primary of the main transformer and stepped down to a lower voltage, converted into AC voltage through IGBT based Converter and inverters and fed to four (04) parallel connected 3 phase traction motors.

For AC MEMU, the configuration of the coaches shall be of either 8/12/16/20/24. Indicative train formation for 8 and 12 car is as shown below:

8 car Formation:

DMC-TC-TC-TC-TC-TC-TC-DMC

12 Car Formation:

DMC-TC-TC-TC-TC-TC-TC-DMC- TC-TC-TC-DMC

DMC: Driving Motor Coach

TC: Trailer Coach

The equipment shall be designed to work satisfactorily under following environmental conditions: -

Relative Humidity	Up to 98% saturation during rainy season which may be as long as five (5) months.
Ambient temp.	i) Max. 50º C ii) Min. - 5ºC
Average annual ambient temperature	35°C.
Maximum temperature inside HT compartment of motor coach	Max. 55º C.
Stationary rake temperature	The temperature of stationary rake may go as high as 70-75 ºC. The equipment shall not be adversely affected in any way due to exposure to such high temperatures. Supplier shall furnish the precautions taken in equipment/ component selection in order to conform to this requirement.
Altitude	At any altitude between 0 and 1200 m above mean sea level.

Rainfall	Very heavy and continuous (up to 2500mm during rainy season) All underslung equipment shall be designed suitably to ensure its normal working even in adverse conditions as above. The equipment shall be so designed to run at 8 Km/h through water up to 203 mm above rail level, allowance to be made in addition for increase in the height of water level due to wave effect. In case of flood level increasing more than 203mm, the MEMU shall be made dead. There are certain sections of the track that get flooded with water to standing depth of 400mm. **The traction gear and other under slung equipment must be completely water proof to this height above rail level. During the peak flood condition water may reach up to floor level. The equipment shall not get damaged due to such flooding and it should be possible to rejuvenate the equipment with minor attention without any adverse effect on their performance**.
Atmosphere during hot weather	Extremely dusty, humid and salty. The MEMU shall be working primarily in coastal area and thus shall be continuously exposed to highly corrosive, salty atmosphere along with industrial pollutants. Special care shall be taken to ensure no damage to equipment due to deposition of atmospheric salts and industrial pollutants. Supplier shall enclose details of specific measures adopted to ensure the satisfactory working of equipment against the deposition of salts & industrial pollution.
Vibrations	The vibration levels at some intermittent points on the track may be higher than those specified by the relevant IEC publication (IEC 61373). The suspension system and the mounting arrangements shall be so designed that the equipment's performance is not adversely affected due to such high vibrations and shocks.

3.4 STANDARDS

The equipment covered by the specification shall be designed, engineered, manufactured, built, tested and commissioned in accordance with the Acts, Rules, Laws and Regulations of India.
The equipment to be furnished under this specification shall conform to latest issue (with all amendments) of specified standards.
In addition to meeting the specific requirement called for in Sections 2 of the Technical Specification, the equipment shall also conform to the general requirement of the applicable standards, which shall form an integral part of the specification. The Bidder shall note that standards mentioned in the specification are not mutually exclusive or complete in themselves, but intended to complement each other. When the specific requirements stipulated in the specifications exceed or differ from those required by the applicable standards, the stipulation of the specification shall take precedence.
Other internationally accepted standards, which ensure equivalent or better performance than that specified in the standards referred, shall also be accepted. The bidder shall submit copies of such standards.

3.5 SERVICES TO BE PERFORMED BY THE EQUIPMENT BEING FURNISHED

All equipment shall also perform satisfactorily under various other electrical, electromechanical and meteorological conditions of the site of installation. All equipment shall be able to withstand all external and internal mechanical, thermal and electromechanical forces due to various factors like wind load, temperature variation, ice & snow, (wherever applicable) short circuit etc. for the equipment.

3.6 ENGINEERING DATA

3.6.1 DRAWINGS

The contactor shall necessarily submit all the drawings/ documents unless anything is waived. The contactor shall submit 6 (six) sets of drawings/ design documents/ data/ test reports as may be required for the approval of the purchaser. All drawings submitted by the Manufacturer including those submitted at the time of bid shall be in sufficient detail to indicate the type, size, arrangement, material description, Bill of Materials, weight of each component, break-up for packing and shipment, the external connections, fixing arrangement required, dimensions required for installation and interconnections with other equipment and materials, clearances and spaces required for installation and interconnections between various portions of equipment and any other information specifically requested in the specifications.

Each drawing submitted by the Manufacturer shall be clearly marked with the name of the Customer and Project, the unit designation, the specifications title, the specification number, date of revision (if any), duly signed by the concerned technical person. If standard catalogue pages are submitted, the applicable items shall be indicated therein and should be made project specific. All titles, noting, markings and writings on the drawing shall be in English. All the dimensions should be in metric units.

Further work by the Manufacturer shall be in strict accordance with these drawings and no deviation shall be permitted without the written approval of the Purchaser, if so required.

All manufacturing and fabrication work in connection with the equipment prior to the approval of the drawings shall be at the Manufacturer's risk. The Manufacturer may make any changes in the design which are necessary to make the equipment conform to the provisions and intent of the Contract and such changes will again be subject to approval by the Purchaser. Approval of Manufacturer's drawing or work by the Purchaser shall not relieve the manufacturer of any of his responsibilities and liabilities under the Contract.

All engineering data submitted by the Manufacturer after final process including review and approval shall form part of the Contract Document and the entire works performed under these specifications shall be performed in strict conformity, unless otherwise expressly requested by the Owner in Writing.

The title block of drawings shall contain the following information incorporated in all contract drawings

1. Customer : BHEL /Indian Railways
2. Project: DESIGN, DEVELOPMENT, MANUFACTURE, SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF 25kV IGBT BASED THREE PHASE ELECTRICS (ON BOARD MOUNTED) FOR AC MEMUs.
3. Main Contractor : Bharat Heavy Electricals Limited
4. BHEL Order No. & Date :

3.6.1.1 SIZE OF DRAWINGS

The drawings of the following parts shall be to the sizes indicated below

I. Equipment details – full size or half size
II. Motor Assemblies – 1:5

III. General Assemblies- 1:10

The dimensions, weight, capacity, etc. shall be in SI units. All drawings shall be submitted on CDs along with complete setup with software for reading and taking prints through desk top PC and suitable printer. In case the format is not compatible with AUTOCAD necessary customized hardware and software shall be submitted.

3.6.1.2 METHOD OF FILING OF DRAWINGS

To facilitate filing of drawings, it is essential that each drawing submitted for approval is marked so that it can be identified. The supplier is, therefore, required to ensure that all prints are marked legibly at the right hand bottom corner. The following information is required in respect of each drawing:

I. Supplier's drawing number.
II. Supplier's name and date of submission.
III. Contract no. given by the purchaser.
IV. Description of drawings.
V. Relevant Specifications

3.6.2 PHOTOGRAPHS

While the equipment is under manufacture, photographs shall be taken of the various assemblies and sub-assemblies in various stages of production. Photographs on digital media and videos shall also be furnished.

3.6.3 BINDING

Each set of tracings together with a set of photographs shall be suitably bound within a cover of superior quality durable materials with the title block printed on the outside of the cover.

3.7 MARKING OF EQUIPMENT & RATING PLATE

All main assemblies of the equipment shall bear serial number for identification and initials of the purchaser. Where the sub-assemblies/components of the main assemblies are not inter-changeable, the sub-assemblies shall also be marked with the serial nos. of the main assembly of which they form a part.

All equipment/cubicles shall contain rating plates of anodized aluminium with embossed letters. The rating plate will give detailed rating specification and identification of equipment. The details of rating plate of each of the equipment shall be as approved by RDSO.

3.8 INFRINGEMENT OF PATENT RIGHTS

BHEL and Indian Railway shall not be responsible for infringement of patent rights arising due to similarity in design, manufacturing process, components used in design, development and manufacturing of propulsion system & other equipment and any other factor which may be a cause such dispute. The responsibility to settle any issue lies with the manufacturer.

3.9 DOCUMENT SUBMISSIONS

The scheduled dates for the submission of these as well as for, any data/information to be furnished by the Purchaser would be discussed and finalized at the time of award. The following schedule shall be followed generally for approval:

Sl.no.	No. of copies	Schedule
i)	Initial Submission Drawings, Data sheets, Type test Reports	At the time of submission of offer.
ii)	Furnishing of distribution copies of drawings in bound volume	2 Weeks from the date of award. 3 copies for Railways plus 3 copies for BHEL.
iii)	Furnishing of distribution copies of type test reports in bound volumes	Hard copy to be submitted 1 Week from the date of type test and total 3 copies for Railways plus 3 copies for BHEL to be given. Soft copy to be submitted immediately after the completion of the test by email.
iv)	Furnishing of distribution copies of Routine test reports	Hard copy to be submitted 1 Week from the date of routine test and 3 copies for Railways plus 3 copies for BHEL to be given. Soft copy to be

		submitted immediately after the completion of the test by email.
v)	CD/pen drive containing all documents including Installation, Operation & Maintenance manuals.	2 Weeks from the date of award. 3 sets of hard copy and soft copy in editable format i.e. MS word/ MS excel.

3.10 QUALITY ASSURANCE PROGRAMME

To ensure that the equipment and services under the scope of this Contract, whether manufactured or performed within the Manufacturer's Works or at his Sub-manufacturer's premises or at the Purchaser's site or at any other place of Work, are in accordance with the specifications, the Manufacturer shall adopt a suitable quality assurance program to control such activities at all points, as necessary. Such program shall be outlined by the Manufacturer and shall be finally accepted by the Purchaser after discussions before the award of Contract. A quality assurance program of the manufacturer shall generally cover the following:

a) Manufacturer's organization structure for the management and implementation of the proposed quality assurance program:
b) Documentation control system;
c) Qualification data of bidder's key personnel;
d) The procedure for purchases of materials, parts components and selection of sub-Manufacturer's services including vendor analysis, source inspection, incoming raw material inspection, verification of material purchases etc.
e) System for shop manufacturing and site erection controls including process controls and fabrication and assembly control;
f) Control of non-conforming items and system for corrective actions;
g) Inspection and test procedure both for manufacture and field activities;
h) Control of calibration and testing of measuring instruments and field activities;
i) System for indication and appraisal of inspection status;
j) System for quality audits;
k) System for authorizing release of manufactured product to the Purchaser
l) System for maintenance of records;
m) System for handling storage and delivery; and

n) A quality plan detailing out the specific quality control measures and Procedures adopted for controlling the quality characteristics relevant to each item of equipment furnished and/or services rendered.
The Purchaser or his duly authorized representative reserves the right to carry out quality audit and quality surveillance of the system and procedure of the Manufacturer/'his vendor's quality management and control activities.

3.10.1 QUALITY ASSURANCE DOCUMENTS

The Manufacturer shall be required to submit the following all the Quality Assurance Documents as stipulated in the quality plan at the time of purchaser's inspection of equipment/ material.

3.11 TYPE AND ROUTINE TESTING & INSPECTION

1) The individual equipment, systems and sub systems shall be type and routine tested in accordance with the relevant RDSO/IEC/BS/DIN/JIS/IS or equivalent Specification inclusive of the mandatory and optional tests along with the special tests as specified.

2) All type tests shall be carried out at the Supplier's cost where ever performed in presence of and to the satisfaction of BHEL/RDSO/Indian Railways (IR)/ Third Party, who reserves the right to witness any or all of the tests.

3) Wherever any equipment, system, sub system is not specifically covered by an international recognized specification or test procedure, the tests which are acceptable to both to Supplier and to the IR's representative shall be devised.

4) Without prejudice to any provisions of the contract, the purchaser reserves the right to witness any or all of the type tests and to require submission of any or all test specification and reports.

5) The price of conducting all tests and additional type tests is deemed to be included in Bid price. In case any bidder indicates that he shall not carry out a particular test, his offer shall be considered incomplete and shall be liable to be rejected.

6) The Purchaser, his duly authorized representative and/or outside inspection agency acting on behalf of the Purchaser shall have at all reasonable times free access to the Contractors premises or Works and shall have the power, at all reasonable times to inspect and examine the materials and workmanship of the works during its manufacture or erection if part of the Works is being manufactured or assembled at other premises or works, the Manufacturer shall obtain for the Engineer and for his duly authorized representative permission to inspect as if the works were manufactured or assembled on the Manufacturer’s own premises or works. Inspection may be made at any stage of manufacture, dispatch or at site as the option of the Purchaser and the equipment if found unsatisfactory due to bad workmanship or quality, material is liable to be rejected.

7) In all cases where the Contract provides for tests whether at the premises or at the works of the Manufacturer or of any Sub-Contractor, the Manufacturer except where otherwise specified, shall provide free of charge items such as labor, materials, electricity, fuel, water, stores, apparatus and instruments as may be reasonably demanded by the Purchaser /Inspector or his authorized representative to carry out effectively such tests of the equipment in accordance with the Contract and shall give facilities to the Purchaser Inspector or to his authorized representative to accomplish testing.

8) The inspection by Purchaser and issue of Inspection Certificate thereon shall in no way limit the liabilities and responsibilities of the Manufacturer in respect of the agreed quality assurance program forming a part of the Contract.

9) The Purchaser reserves the right for getting any field tests not specified in respective sections of the technical specification conducted on the completely assembled equipment at site.

10) During the prototype tests/trials or services, if any problems arise or feedback information is obtained, which warrants a re-check of the design/manufacture/quality of the equipment and components, action will be taken as may be necessary by the Supplier to carry out the required investigations and to incorporate the improvements

considered most appropriate to reach compliance with the specification without any extra costs to the Purchaser.

11) The prototype rakes fitted with the supplied equipment, shall be subjected to pre-revenue service trials. Service trials are intended to prove the satisfactory running performance of the supplied MEMU equipment and evaluate their reliability in service, ease of maintenance and operations. The performance of the equipment shall be assessed based on the experience gained during the service trials. Necessary modification as required and also as desired by the RDSO/Indian Railway shall be implemented in the series production without any extra costs to the Purchaser.

12) Before carrying out any modification, as found necessary on the basis of tests and trials, the drawings and execution plan shall be got approved from the RDSO.

3.12 MATERIALS AND WORKMANSHIP

Equipment materials and components shall be new, of high grade and good quality and be to the latest engineering practice. The material and workmanship throughout shall be in accordance with the purpose for which they are intended. Each component shall be designed to be consistent with its duty.

All the information concerning materials or components to be used in manufacturing, machinery, equipment, materials and components supplied, installed or used shall be submitted for approval. Without such approval the supplier shall run risk of subsequent rejection. The cost as well as time delay associated with such rejection shall be borne by the supplier.

3.13 PACKING AND STORAGE

All the equipment’s shall be suitably protected, coated, covered or boxed and crated to prevent damage or deterioration during transit, handling and storage at site till the time of erection. On request of the purchaser, the manufacturer shall also submit packing details/ associated drawing for any equipment/ material at a later date, in case the need arises.

While packing all the materials, the limitation from the point of view of availability of Railway wagon sizes in India should be taken into account. The manufacturer shall be responsible for any loss or damage during transportation, handling and storage due to improper packing. Any demurrage, wharf age and other such charges claimed by the transporters, railways etc. shall be to the account of the manufacturer. Purchaser takes no responsibility of the availability of the wagons.

All coated surfaces shall be protected against abrasions, impact, discoloration and any other damages. All exposed threaded portions shall be suitably protected with either a metallic or a non-metallic protecting device.

Supplier shall ensure that equipment shall be properly packed, blocked, padded, coated and protected so that it is not damaged due to possible mishandling. Storage requirements shall be clearly defined by the supplier. Packing shall be such that if required, long time storage at site should not deteriorate the performance of the equipment.

3.14 FIRE PREVENTION

i) The equipment's shall be designed to minimize the risk of any fire.
ii) Materials used in the manufacture of equipment's shall be selected to reduce the heat load, rate of heat release, propensity to ignite, rate of flame spread, smoke emission and toxicity of combustion gases.
iii) The Supplier shall comply with specification NF F 16-101: (Railway Rolling Stock Fire behavior "Choice of Material"), NF F 16-102: (Railway Rolling Stock Fire behavior "Material choosing, application for electric system" category A2), BS 6853 – 1999 Category II or DIN 5510, EN 45545(for rolling stoke design) CET.HL-2 or any other equivalent/superior international standard for fire safety plan in respect of their equipment. Whichever standard is selected for meeting the fire safety, the standard shall be declared and a copy shall be furnished to BHEL/RDSO.

3.15 MAINTENANCE MANUAL, SPARE PARTS CATALOGUE & MATERIAL SPECIFICATION

The detailed maintenance and service manual (including the trouble shooting directory shall be prepared for the various equipment's and 3 sets of hard copies & soft copy of the same shall be supplied free of charge.
Detailed spare parts catalogue listing all components manufactured or purchased by the supplier along with their rating, source & schematic position etc. (40 copies) each shall also be supplied free of charge.

The documentation shall be provided on compact discs & floppies (5 no's) along with relevant software and complete arrangements to read them or edit them in future to take prints in color.

3.16 MAINTAINABILITY

Supplier shall submit the basic maintenance schedules of the proposed equipment. Minimum interval between two maintenance schedules for the equipment supplied under the specification in the depot shall be 90 days except for the pantograph strips and 3 years for major works in workshop/major depot.

It may be noted that the periodicity of the present maintenance schedules are as under: -

I 'A'	45 days
I 'C'	180 days
POH	18 months

The maintenance programme prepared by supplier shall have the following objectives ascertaining the above periodicity of maintenance schedules:

a) Enhancement of EMU/MEMU availability
b) Minimization of maintenance costs
c) Minimization of coach downtime /MTTS (meantime to restore serviceability).

3.16.1 Based on the proposed maintenance schedules the supplier will submit average downtime on account of scheduled maintenance for the equipment to be supplied excluding the time required for transfer of rake to and from the maintenance depot. Ineffective on this account should not exceed Two percent. Supplier should also submit an estimate for the downtime for unscheduled maintenance in respect of equipment to be supplied. The supplier shall assess and submit the figure for 'total percentage Ineffective', in terms of percentage of rakes expected to be ineffective/unserviceable due to schedule and unscheduled repairs/maintenance of equipment supplied (excluding the time taken for transfer of the rakes to and from maintenance depot) against the total number of rakes fitted with the equipment under his scope of supply. This ineffective figure shall not exceed FOUR percent in any week (Monday-Sunday) calculated on 24 hourly basis. If during the test and service trial period of prototype rakes, it is experienced that downtime due to unscheduled repairs/scheduled maintenance of the equipment supplied is excessive, supplier shall be required to take suitable remedial measures to bring the ineffective figure within the limit submitted during the design approval stage without any cost."

3.16.2 Modular design principles shall be employed. Requirements for adjustments after module interchange shall be avoided except as required in the specification. All systems, components and structural areas serviced as part of inspection or periodic preventive maintenance shall be readily accessible for service and inspection.

3.17 RELIABILITY

In addition to meeting the performance requirements, the equipment, shall incorporate high standards of reliability to ensure that operating cost and operation performance are optimized.

The Bidder shall provide the achieved quantitative reliability data of major subsystem/equipment, expressed in Mean Time between Failures (MTBF) and/or Mean distance between Failure (MDBF), based on operations of proven coaches fitted with similar equipment for a minimum of 3 years and 450,000 kilometers per coach in revenue service, for purchaser's and IR's evaluation. The definition of MTBF & MDBF for this purpose may be considered as: MTBF = No. of equipment (Population) x Period (Time)/Total number of failures during that period. MDBF = No. of equipment (Population) x Kilometer run (Distance)/Total number of failures during that distance

The MTBF shall be submitted for the ambient temperatures of 45º C, 50º C, 55º C and at the temperature expected inside the HT compartment as per the Bidder's calculation.

A list of equipment for which the MTBF and/or MDBF values shall be submitted along with calculation (method) during the design approval stage is enclosed as annexure XIII. Bidder shall submit the list of equipment and confirmation at the bid stage.

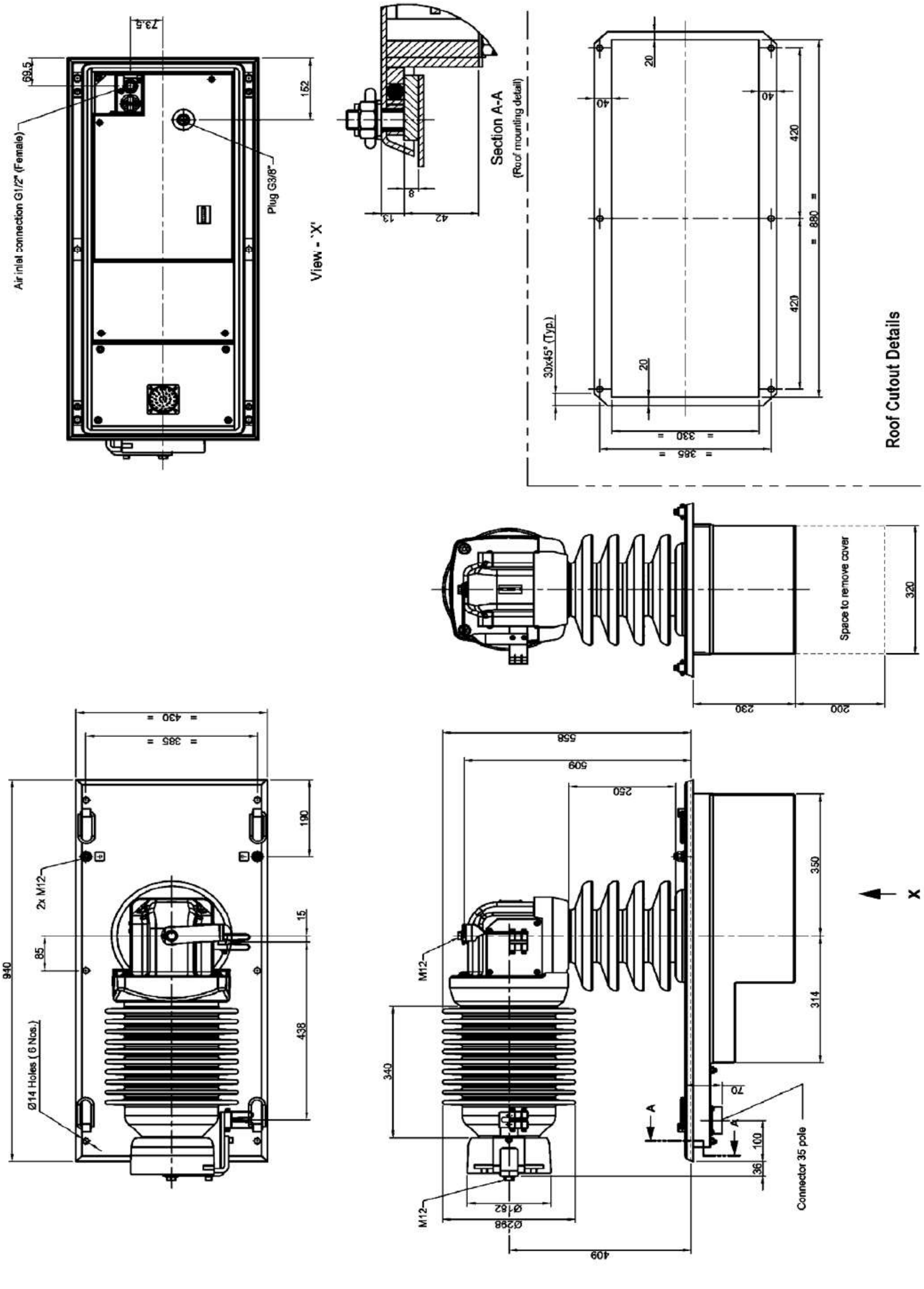
Failure is defined as "An electrical multiple unit (on units) on a suburban service should be considered to have failed, when through some mechanical or electrical defect in the stock:-

a) Either unit is unable to complete its booked working throughout the day.

or

b)A delay of not less than 15 minutes is caused to any train included in the booked working of the day. Failures of all coaches, whether employed on traffic or departmental service, are to be included.

ANNEXURE-1

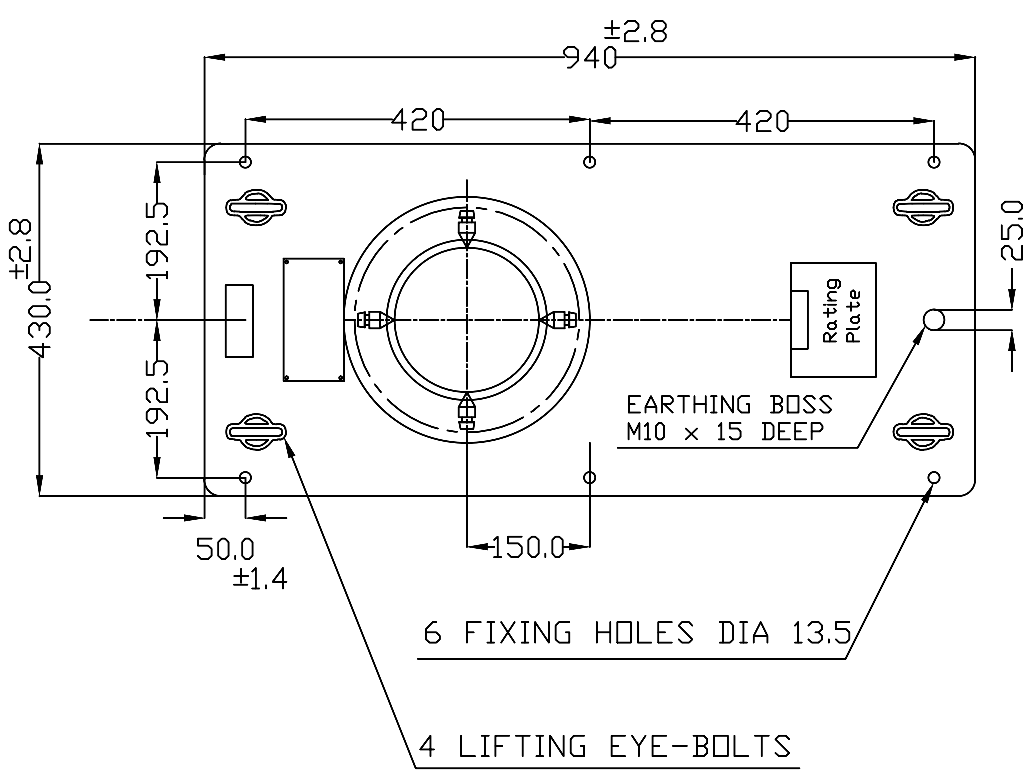


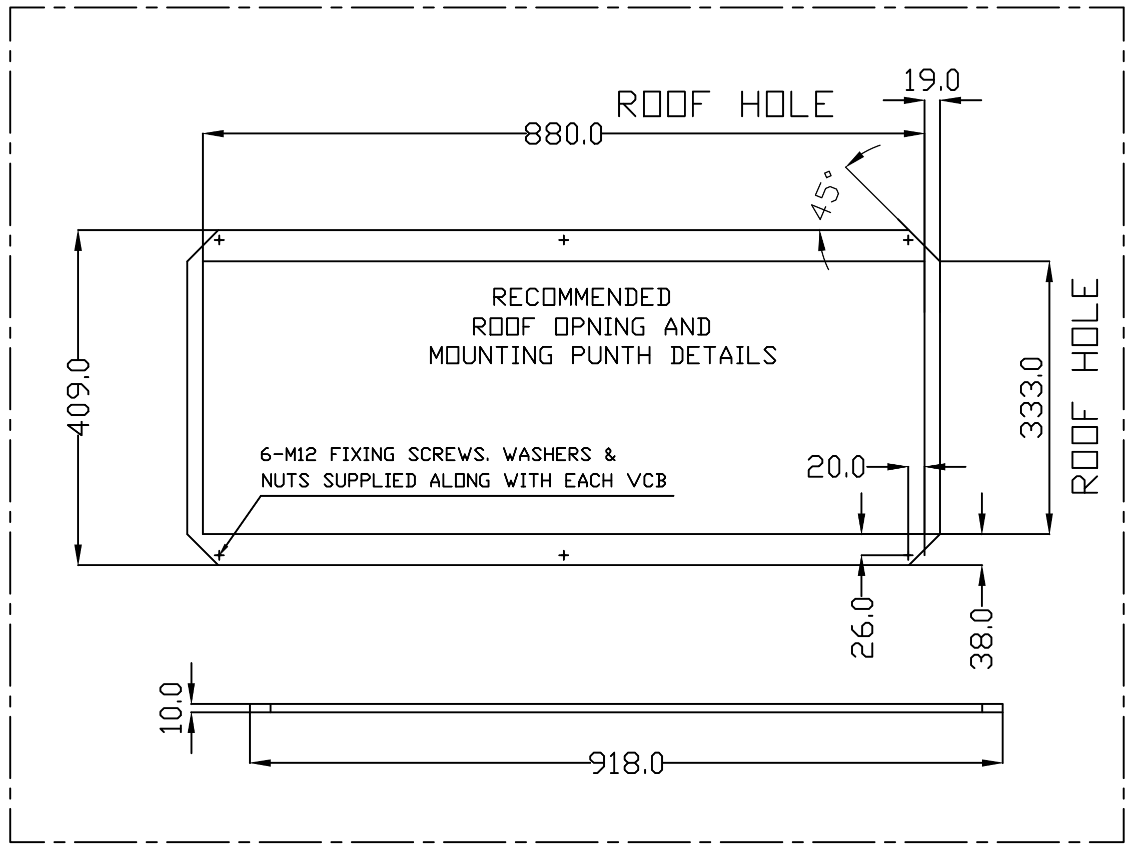
Air inlet connection G1/2" (Female)
Plug G3/8"
View - 'X'
Section A-A
(Roof mounting detail)
30x45° (Typ.)
Roof Cutout Details
Space to remove cover
2x M12
Ø14 Holes (6 Nos.)
M12
Connector 35 pole

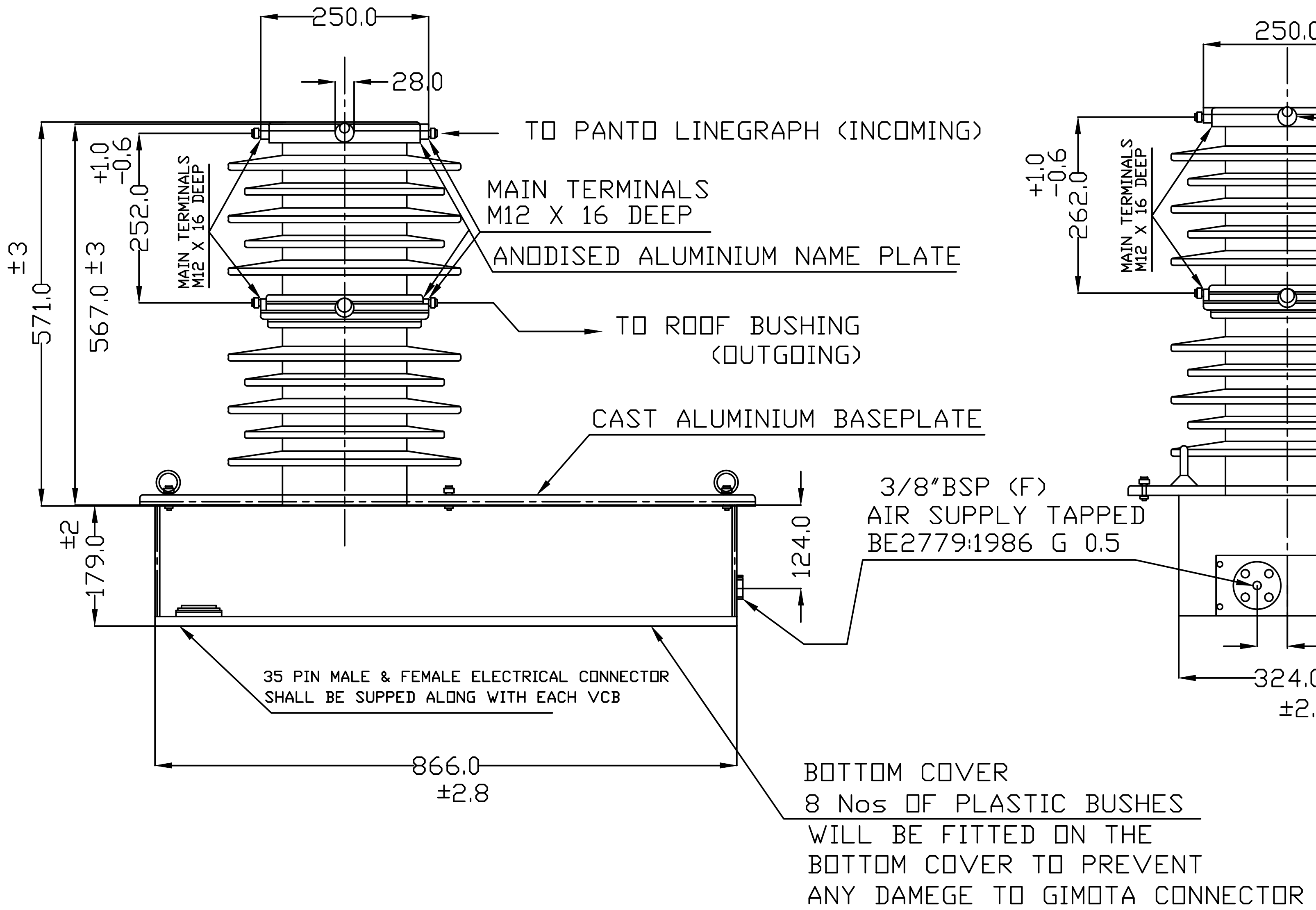
FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN MM)

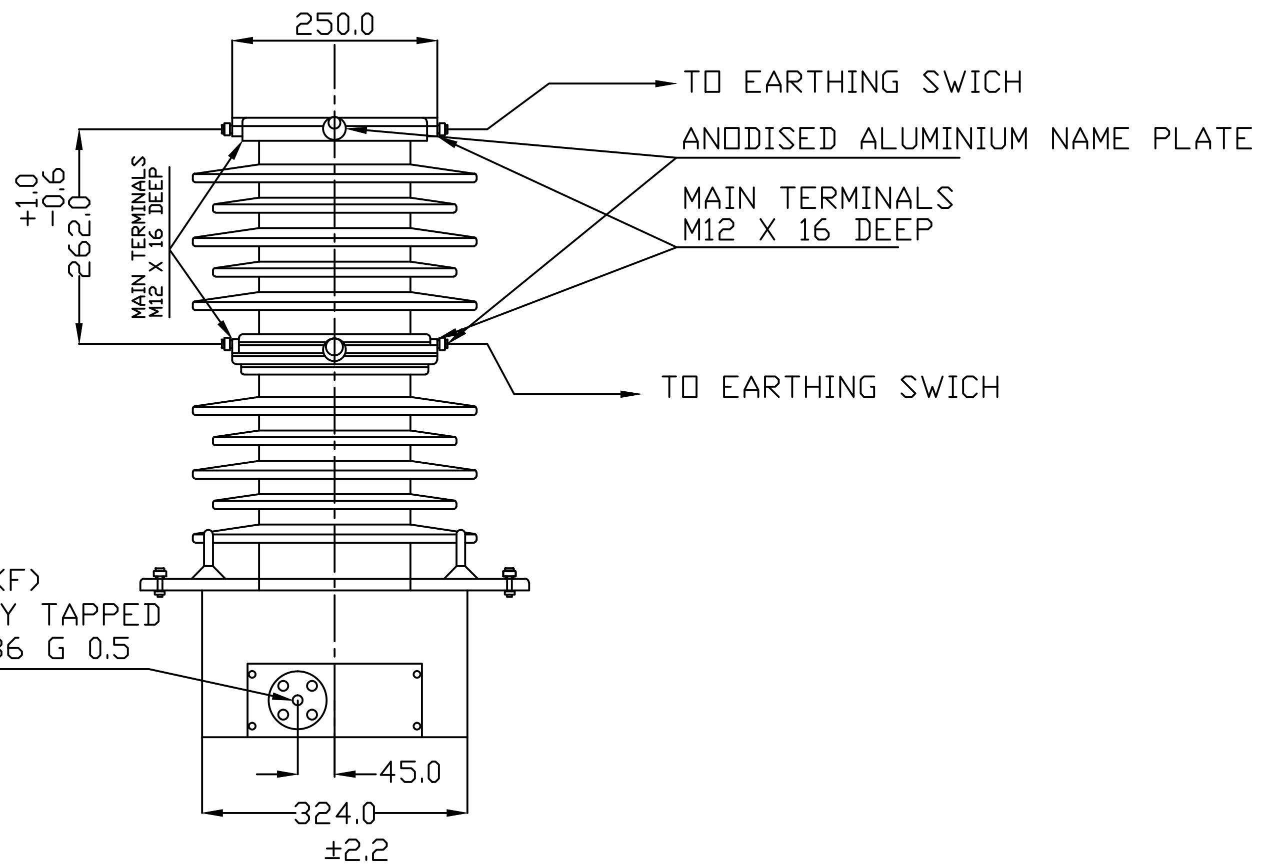
DRG. NO.

ANNEXURE–2









NAME OF CUSTOMER/ INTEGRAL COACH FACTORY CHENNAI/RDSO LUCKNOW
PROJECT 25kV AC IGBT Bbased 3-Phase Propulsion System & Equipment
Contract No.

	NAME	DATE
DRAWN	MAHENDRA	13.08.2019
CHECKED	ABHIDEEP	13.08.2019
APPROVED	PRAFFUL	13.08.2019

DISTRIBUTION OF PRINTS

बीएचईएल BHEL

DEPT.	CODE
TBSG	018

BHARAT HEAVY ELECTRICALS LIMITED
TRANSPORTATION BUSINESS & SYSTEMS GROUP

Scale

TITLE
OGA OF VACUUAM CIRCUIT BREAKER

SHEET No. 1 of 1

SIZE A3 W.O. No. ----- DRG. No. REV. 00

COMPUTER DRG. PATH NAME :

SIGN & DATE

INVENTORY NO.

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

PERFORMANCE CERTIFICATE

Name of firm: ....

TO WHOMSOEVER IT MAY CONCERN

Sub : Confirmation letter for service performance

Dear Sir,

We hereby confirm that We .... have manufactured ______ number of sets of ....(Name of Equipment with Model No.) for 3 Phase IGBT based EMUs/MEMUs/Metros/LOCOs.

We further confirm that ……… number of sets of ....(Name of Equipment with Model No.) for 3 Phase IGBT based EMUs/ MEMUs/Metros/Locos are in satisfactory operation for railway rolling stock application for a period of minimum 02 years in last 05 years, excluding the year of bid opening.

Proforma for performance statement confirming above is also attached.

Yours faithfully

For (Name of Firm)

IGBT BASED 3-PHASE DRIVE AC MEMU
PROFORMA FOR PERFORMANCE STATEMENT

Name of the Equipment:
Name of Firm :

S. No.	Order placed by (full address of Purchaser)	Order No. and Date	Description of Quantity of ordered equipment	Details of System for which equipment was supplied at Sr. No. 4 above to be given as follows			Value of Order	Date of Completion of Delivery		Remarks indicating Reasons for late Delivery, if any	Qty. in Satisfactory Service on 3 Phase IGBT based EMU's/MEMUs/ Locos/Metros
				Supply System	Unit Formation	Speed Potential		As per Contract	Actual		
(1)	(2)	(3)	(4)	(5)			(6)	(7)	(8)	(9)	(10)

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Ltd.,

(A Government of India undertaking)

Electronics Division

PB 2606 , Mysore Road Bangalore , 560026 INDIA

CE: PR: 002- Rev 01

GENERAL COMMERCIAL CONDITIONS FOR CONTRACT

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

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

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

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

a) 'The Purchaser' means Bharat Heavy Electricals Limited, Electronics division, Mysore road, Bangalore 560 026, a Unit of Bharat Heavy Electricals Limited (A Govt. of India Undertaking) incorporated under the Companies Act having its registered office at BHEL House, Siri Fort, New Delhi-110049, India and shall be deemed to include its successors and assigns. It may also be referred to as BHEL.
b) 'The vendor' means the person, firm, company or organization on whom the Purchase Order is placed and shall be deemed to include the vendor's successors, representative heirs, executors and administrator as the case may be. It may also be referred to as Seller, Contractor or Supplier.
c) 'Contract' shall mean and include the Purchase Order incorporating various agreements, viz. tender/ RFQ, offer, letter of intent/acceptance/ award, the General Conditions of Contract and Special Conditions of Contract for Purchase, Specifications, Inspection/ Quality Plan, Schedule of Prices and Quantities, Drawings, if any enclosed or to be provided by BHEL or his authorized nominee and the samples or patterns if any to be provided under the provisions of the contract.
d) 'Parties to the Contract' shall mean the 'The Vendor' and the Purchaser as named in the main body of the Purchase Order.

Order of Precedence:

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

Interpretation:

In the contract, except where the context requires otherwise:

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

c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and

d) "Written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

Applicable Conditions:

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

2. Ordering and confirmation of Order:Vendor shall send the order acceptance on their company letter head/ through e-mail within a week from the date of receipt of Purchase Order or such other period as specified/ agreed by BHEL. BHEL reserves the right to revoke the order placed if the order confirmation differs from the original order placed. The acceptance of goods/services/supplies by BHEL as well as payments made in this regard shall not imply acceptance of any deviations.
   The purchase order will be deemed to have been accepted if no communication to the contrary is received within one week (or the time limit as specified/agreed by BHEL) from the date of receipt of the purchase order.

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

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

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

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

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

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

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

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

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

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

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

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

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

13. Packaging and dispatch:The Seller shall package the goods safely and carefully and pack them suitably in all respects considering the peculiarity of the material for normal safe transport by Sea/ Air / Rail/ Road to its destination suitably protected against loss, damage, corrosion in transit and the effect of tropical salt laden atmosphere. The packages shall be provided with fixtures/ hooks and sling marks as may be required for easy and safe handling. If any consignment needs special handling instruction, the same shall be clearly marked with standard symbols / instructions. Hazardous material should be notified as such and their packing, transportation and other protection must conform to relevant regulations.
    The packing, shipping, storage and processing of the goods must comply with the prevailing legislation and regulations concerning safety, the environment and working conditions. Any Imported/Physical Exports items packed with raw/ solid wood packing material should be treated as per ISPM – 15 (fumigation) and accompanied by Phytosanitory/ Fumigation certificate. If safety information sheets (MSDS – Material Safety Data Sheet) exist for an item or the packaging, vendor must provide this information without fail along with the consignment.
    Each package must be marked with Consignee name, Purchase order number, Package number, Gross weight and net weight, dimensions (LxBxH) and Seller's name. Packing list of goods inside each package with PO item number and quantity must also be fixed securely outside the box to indicate the contents of each box. Total number of packages in the consignment must also be indicated in the packing list.
    Separate packing & identification of items should be as follows.
    1. Main Scope - All items must be tagged with part no. & item description.
    2. Commissioning accessories/spares - All items must be tagged with part no. & item description.
    3. Mandatory spares - All items must be tagged with part no. & item description.
    Nevertheless, vendor shall adhere to dispatch & packing instructions issued by BHEL at the time of dispatch.

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

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

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

17. Cancellation /Termination of contract: BHEL shall have the right to completely or partially terminate the agreement by means of written notice to that effect. Termination of the Contract, for whatever reason, shall be without prejudice to the rights of the parties accrued under the Contract up to the time of termination.
    BHEL shall have the right to cancel/foreclose the Order/ Contract, wholly or in part, in case it is constrained to do so on account of any decline, diminution, curtailment or stoppage of the business.

18. Risk Purchase Clause: In case of failure of supplier, BHEL at its discretion may make purchase of the materials / services not supplied / rendered in time at the RISK & COST of the supplier. Under such situation, the supplier who fails to supply the goods in time shall be wholly liable to make good to BHEL any loss due to risk purchase.
    In case of items demanding services at site like erection and commissioning, vendor should send his servicemen/representatives within 7 days from the service call. In case a vendor fails to attend to the service call, BHEL at its discretion may also make arrangements to attend such service by other parties at the **RISK & COST** of the supplier. Under such situation the supplier who fails to attend the service shall be wholly liable to make good to BHEL any loss due to risk purchase/service including additional handling charges due to the change.

19. Shortages: In the event of shortage on receipt of goods and/or on opening of packages at site, all such shortages, caused by supplier's act or omission, shall be made good at free of cost within a reasonable time that BHEL may allow from such intimation.
    Transit Damages: In the event of receipt of goods in damaged condition or having found them so upon opening of packages at site, supplier shall make good of all such damages within a reasonable time from such intimation by BHEL. In case BHEL raises an insurance claim, the cost of material limited to insurance settled amount less handling charges will be reimbursed to supplier.

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

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

22. Product Information, Drawings and Documents: All specified drawings, technical documents or other technical information received by Vendor from BHEL or vice versa shall not, without the consent of the other party, be used for any other purpose than that for which they were provided. They may not, without the consent of the Disclosing party, otherwise be used or copied, reproduced, transmitted or communicated to third parties. All information and data contained in general product documentation, whether in electronic or any other form, are binding only to the extent that they are by reference expressly included in the contract.
    Vendor, as per agreed date/s but not later than the date of delivery, provide free of charge information and drawings which are necessary to permit and enable BHEL to erect, commission, operate and maintain the product. Such information and drawings shall be supplied in as many numbers of copies as may be agreed upon.
    All intellectual properties, including designs, drawings and product information etc. exchanged during the formation and execution of the Contract shall continue to be the property of the disclosing party.

23. Intellectual Property Rights, Licenses: If any Patent, design, Trade mark or any other intellectual property rights apply to the delivery (goods/related service) or accompanying documentation shall be the exclusive property of the Vendor and BHEL shall be entitled to the legal use thereof free of charge by means of a non-exclusive, worldwide, perpetual license. All intellectual property rights that arise during the execution of the Purchase Order/ contract for delivery by vendor and/or by its employees or third parties involved by the vendor for performance of the agreement shall belong to BHEL. Vendor shall perform everything necessary to obtain or establish the above mentioned rights. The Vendor guarantees that the delivery does not infringe on any of the intellectual property rights of third parties. The Vendor shall do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged)

claims by third parties. The Vendor shall indemnify BHEL against any (alleged) claims by third parties in this regard and shall reimburse BHEL for any damages suffered as a result thereof.

24. <u>Force Majeure:</u> Notwithstanding anything contained in the purchase order or any other document relevant thereto, neither party shall be liable for any failure or delay in performance to the extent said failures or delays are caused by the "Act of God" and occurring without its fault or negligence, provided that, force majeure will apply only if the failure to perform could not be avoided by the exercise of due care and vendor doing everything reasonably possible to resume its performance.
    A party affected by an event of force majeure which may include fire, tempest, floods, earthquake, riot, war, damage by aircraft etc., shall give the other party written notice, with full details as soon as possible and in any event not later than seven (7) calendar days of the occurrence of the cause relied upon. If force majeure applies, dates by which performance obligations are scheduled to be met will be extended for a period of time equal to the time lost due to any delay so caused.

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

25. <u>Warranty:</u>
    Wherever required, and so provided in the specifications/ Purchaser Order, the Seller shall ensure that the goods supplied shall comply with the specifications laid down, for materials, workmanship and performance.
    Unless otherwise specified in SCC, warranty period shall be applicable for a period of 24 months from the date of delivery of goods or 18 months from the date of commissioning of goods, whichever is earlier.
    The warranty period as described above shall apply afresh to replaced, repaired or re-executed parts of a delivery. Unless otherwise specifically provided in the Purchase Order, Vendor's liability shall be co terminus with the expiration of the applicable warranty period.

26. <u>Limitation of Liability:</u> Vendor's liability towards this contract is limited to a maximum of 100% of the contract value and consequential damages are excluded. However the limits of liability will have no effect in cases of criminal negligence or wilful misconduct.
    The total liability of Vendor for all claims arising out of or relating to the performance or breach of the Contract or use of any Products or Services or any order shall not exceed the total Contract price.

27. <u>Liability during warranty</u>: Vendor shall arrange replacement / repair of all the defective materials / services under its obligation during the warranty period. The rejected goods shall be taken away by vendor and replaced / repaired. In the event of the vendor's failure to comply, BHEL may take appropriate action including disposal of rejections and replenishment by any other sources at the cost and risk of the vendor.
    In case, defects attributable to vendor are detected during Warranty period or where the commissioning call is issued within the warranty period, vendor shall be responsible for replacement/ repair of the goods as required by BHEL at vendor's cost even after expiry of warranty period.
    Further if the equipment or any part thereof cannot be used by reason of such defect and/or making good of such defect, the warranty period of the equipment or such part, as the case may be, shall be extended by a period equal to the period during which the equipment or such part cannot be used by BHEL because of any of the aforesaid reasons. Upon correction of the defects in the facilities or any part thereof by repair/replacement, such repair/replacement shall have the warranty period for a period of twelve (12) months from the time such replacement/repair of the equipment or any part thereof has been completed.

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

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

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

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

    ARBITRATION & CONCILIATION

    The parties shall attempt to settle any disputes or difference arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, or in connection with this contract through friendly discussions. In case no amicable settlement can be reached between the parties through such discussions, in respect of any dispute; then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL–EDN. Such Sole Arbitrator appointed, shall conduct the arbitration in English language.
    The Arbitrator shall pass a reasoned award and the award of the Arbitration shall be final and binding upon the Parties.
    Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Bangalore.
    The cost of arbitration shall be borne as decided by the Arbitrator upon him entering the reference.
    Subject to the Arbitration Clause as above, the Courts at Bangalore alone shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.
    Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the parties shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and efficiency in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.

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

    In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either party for Arbitration to the Sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any Party aggrieved by such Award may make further reference for setting aside or revision of the Award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.’

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

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

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

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

CE:PR:001- Rev 02

INSTRUCTIONS TO BIDDERS

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

A. GENERAL INSTRUCTIONS:

1. Any Purchase Order resulting from this enquiry shall be governed by the Instructions to Bidders (document reference: CE: PR: 001 – Rev 02), General Conditions of Contract (document reference: CE: PR: 002 - Rev 01) and Special Conditions of Contract, if any, of the enquiry.
2. Any deviations from or additions to the "General Conditions of Contract" or "Special Conditions of Contract" require BHEL's express written consent. The general terms of business or sale of the bidder shall not apply to this tender.
3. Regret letter (either through post or by mail or by EPS) indicating reasons for not quoting must be submitted without fail, in case of non-participation in this tender. Supplier shall be liable for removal as a registered vendor of BHEL when the supplier fails to quote against four consecutive tender enquiries for the same item or all enquiries in last two years for the same item, whichever is earlier.
4. Procurement directly from the manufacturers is preferred. However, if the OEM/ Principal insist on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both. Agent/Representative authorized by the OEM/Principal in turn cannot further sub authorize any other firm for submitting the offer or for placement of order.

   In case bids are received from the manufacturer/ supplier and his agent, bid received from the agent shall be ignored.
5. Consultant / firm (and any of its affiliates) shall not be eligible to participate in the tender/s for the related goods for the same project if they were engaged for consultancy services for the same project.
6. If an Indian representative/associate/liaison office quotes on behalf of a foreign based bidder, such representative shall furnish the following documents:
   a. Authorization letter to quote and negotiate on behalf of such foreign-based bidder.
   b. Undertaking from such foreign based bidder that such contract will be honored and executed according to agreed scope of supply and commercial terms and conditions.
   c. Undertaking shall be furnished by the Indian representative stating that the co-ordination and smooth execution of the contract and settlement of shortages/damages/replacement/repair of imported scope till the equipment is commissioned and handed over to customer will be the sole responsibility of the Indian representative/associates/agent/liaison office.
   d. Refer **Annexure I** on "Guidelines for Indian Agents".

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

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

8. The offers of the bidders who are on the banned list and also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of the banned firms is available on BHEL website: http://www.bhel.com/vender_registration/vender.php
9. Business dealings with bidders will be suspended if they are found to have indulged in any malpractices/misconduct which are contrary to business ethics like bribery, corruption, fraud, pilferage, cartel formation, submission of fake/false/forged documents, certificates, information to BHEL or if they tamper with tendering procedure affecting the ordering process or fail to execute a contract, or rejection of 3 consecutive supplies or if their firms / works are under strike/lockout for a long period.Bidder may refer "Guidelines for Suspension of Business Dealings with Suppliers/ Contractors" available on www.bhel.com for more details.
10. The bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to your notice.

11. For this procurement, Public procurement (Preference to Make in India), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO against this NIT.

Any bidder intending to avail the benefits shall submit the requisite documents as per the aforesaid order.

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

B. GUIDELINES FOR PREPARATION OF OFFER:

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

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

   - **TWO PART BID**: Unpriced offer i.e. "Techno-commercial Bid" with filled in BHEL Standard Commercial terms and conditions in a sealed envelope **along with the copy of the "Price Bid"without the prices** should be enclosed in one cover and the cover must be super scribed **"Techno-commercial offer)** and Priced offer i.e. "Price Bid"containing price summary in a separate sealed envelope and must be super scribed **"Price Bid"**.Both these envelopes shall be enclosed in a single sealed envelope superscribed with enquiry number, due date of tender and any other details as called for in the tender document.

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

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

2. Supplier shall ensure to superscribe each envelope with RFQ number, RFQ Date, RFQ Due date and time, Item Description and Project clearly & boldly. Also mention on the envelope whether it is "Techno Commercial Bid" or "Price Bid" or "Pre-Qualification Bid". Please ensure complete address, department name and purchase executive name is mentioned on the envelope (before dropping in the tender box or handing over) so that the

tender is available in time for bid opening.

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

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

4. Validity: Unless otherwise specified in SCC (special commercial conditions of contract), the offer will be valid for a period of 90 days from the date of part-I bid opening and in case of Negotiation/Counter-offer/Reverse Auction, price validity will apply afresh for a period of _60_ days from the date of according final price by bidder (or) upto original validity period, whichever is later.

5. Any of the terms and conditions not acceptable to supplier, shall be explicitly mentioned in the Techno-Commercial Bid. If no deviations are brought out in the offer it will be treated as if all terms and conditions of this enquiry are accepted by the supplier without deviation.

6. Deviation to this specification/item description, if any, shall be brought out clearly indicating "DEVIATION TO BHEL SPECIFICATION" without fail, as a part of Techno-Commercial Bid. If no deviations are brought out in the offer it will be treated as if the entire specification of this enquiry is accepted without deviation.

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

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

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

10. For Physical Export projects or wherever services are rendered by foreign suppliers in India, bidders should indicate "lumpsum" Erection and Commissioning (or) Erection Supervision and Commissioning charges, as applicable (including To & Fro Fare, Boarding, Lodging, Local Conveyance etc.) for carrying out E&C activity and further handing over to customer. The quotation shall clearly indicate scope of work, likely duration of commissioning, pre-commissioning checklist (if any).

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

12. Prices should be indicated in both figures & words**.** Bid should be free from correction/overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection. Any typographical error, totalling mistakes, currency mistake, multiplication mistake, summing mistakes etc. observed in the price bids will be evaluated as per **Annexure III** "Guidelines for dealing with Discrepancy in Words & Figures – quoted in price bid" and BHEL decision will be final.

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

C. <u>GUIDELINES FOR OFFER SUBMISSION:</u>

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

1. Offers / Quotations must be dropped in tender box before 13.00 Hrs. on or before due date mentioned in RFQ.The offers are to be dropped in the proper slot of the Tender Box kept in our reception area with caption "CE, SC&PV, DEFENCE". Tenders are opened on 3 days in a week (Monday/Wednesday/Friday). Tender must be deposited in the slot corresponding to the day (Monday - Box no.4/Wednesday - Box no. 6 /Friday - Box no.8) while depositing the offer.

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

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

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

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

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

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

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

   e. In case of e-tender, all required documents should be uploaded before due date and time. Availability of power, internet connections, system/software requirements etc. will be the sole responsibility of the bidder. Wherever assistance is needed for submission of e-tenders, help-line numbers as available in the web-site of service provider of BHEL may be contacted.

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

D. PROCESSING OF OFFERS RECEIVED:

1. Any discount/ revised offer submitted by the supplier on its own shall be accepted provided it is received on or before the due date and time of offer submission (i.e. Part-I bid). The discount shall be applied on pro-rata basis to all items unless specified otherwise by the bidder.
2. Changes in offers or Revised offers given after Part-I bid opening shall not be considered as a part of the original offer unless such changes/revisions are requested by BHEL. In case of withdrawal of any Technical/Commercial deviation(s) by the bidder before opening of price bids/conducting the Reverse Auction, revision of price/impact bid will not be accepted.
3. In case there is no change in the technical scope and/ or specifications and/ or commercial terms & conditions, the supplier will not be allowed to change any of their bids after Technical bids are opened (after the due date and time of tender opening).
4. In case of changes in scope and/ or technical specifications and/ or commercial terms & conditions by BHEL and it accounts for price implications from bidders, all techno-commercially acceptable bidders shall be asked by BHEL (after freezing the scope, technical specifications and commercial terms & conditions) to submit the impact of such changes on their price bid. Impact price will be applicable only for changes in technical specification / commercial conditions by BHEL. The impact price must be submitted on or before the cut-off date specified by BHEL and the original price bid and the price impact bid will be opened together at the time of price bid opening.
5. BHEL reserves the right to adopt Reverse Auction or standard Price Bid Opening procedure for price evaluation, at its discretion. This shall be decided after completion of techno-commercial evaluation of tender (Refer BHEL website http://www.bhel.com/vender_registration/vender.php for Guidelines of Reverse Auction). In case BHEL does not resort to Reverse Auction, the price bids and price impacts (if any) already submitted and available with BHEL shall be opened as per BHEL's standard practice.

6. Un-opened bids (including price bids) will be returned to the respective bidders after release of Purchase order. Regarding Offers for EPS tenders that get rejected on PQC/ techno-commercial grounds, the bids for the subsequent parts will not be opened i.e., both technical bid and price bid (Parts-II & III)will not be opened in case of rejection on PQC ground and price bid (Part-II/Part-III, as applicable) will not be opened in case of rejection on techno-commercial ground.

7. After receipt of Purchase Order, supplier should submit required documents viz.,specified drawings, bill of materials, datasheets, catalogues, quality plan, test procedure, type test report , O & M Manuals and/or any other relevant documents as per Specification/Purchase Order, as and when required by BHEL/Customer.
8. Any deviation to the terms and conditions not mentioned in the quotation by supplier in response to this enquiry will not be considered, if put forth subsequently or after issue of Purchase Order, unless clarification is sought for by BHEL and agreed upon in the Purchase Order.
9. Evaluation shall be on the basis of delivered cost (i.e. “Total Cost to BHEL").

   “Total Cost to BHEL” shall include total basic cost, packing & forwarding charges, taxes and/or duties(as applicable), freight charges, taxes on Services, customs clearance charges for imported items, any other cost indicated by bidder for execution of the contract and loading factors (for non-compliance to BHEL Standard Commercial Terms & Conditions). Benefits arising out of Nil Import Duty on DEEC, EPCG, DFIA Projects, Physical Exports or such 100% exemptions (statutory benefits), project imports, customer reimbursements of statutory duties (like Basic Customs Duty and cess on customs duty), Input tax credits as applicable will also be taken into account for arriving at the Total cost to BHEL (wherever applicable and as indicated in SCC document of tender).

For EPS tenders, it shall be noted that the prices (including discounts) vis-a-vis currency quoted in EPS portal only will be considered as Final for the purpose of evaluation of the lowest bidder. Bidder shall ensure to indicate the applicable taxes against each line item in online portal, failing to which the same will be considered as inclusive/NIL.

10. For evaluation of offers in foreign currency, the exchange rate (TT selling rate of SBI) shall be taken as under:

    Single part bids: Date of tender opening

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

    Reverse Auction: Date of Part-I bid opening

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

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

11. Ranking (L-1, L-2 etc.) shall be done only for the techno-commercially acceptable offers.

E. INFORMATION ON PAYMENT TERMS:

1. All payments will be through Electronic Fund transfer (EFT). Vendor has to furnish necessary details as per BHEL standard format **(Refer Annexure IV)** for receiving all payments through NEFT.(Applicable for Indian vendors only).
2. In case of High Sea Sales transaction, customs clearance of the consignment landed on Indian Sea/Air ports will be done by BHEL based on the original HSS documents provided by vendors. All warehousing charges due to delay in submission of complete and or correct HSS documents to BHEL will be to supplier’s account only. Such recovery will be made out of any of the available bills **(Refer Annexure V)**.
3. Statutory deductions, if any, will be made and the deduction certificate shall be issued.

   A. In case vendor does not provide PAN details, the TDS deduction shall be at the maximum percentage stipulated as per the provisions of Income Tax Act.

      In addition to the above, Foreign vendors shall also submit relevant details of their bankers like Swift Code, Banker’s Name &Address etc.

   B. TDS deduction as per section 51 of CGST Act,2017 shall be applicable as per Gazette Notification No. 50/2018-Central Tax, Dated: 13th September 2018 and subsequent notification/s, as and when released by Govt. authorities.
4. Incomplete documentation will not be accepted. Delayed submission of invoice / documents may result in corresponding delay in payment. In this connection, request to also refer clause: G about invoicing & payment formalities under GST regime. Applicable documents shall be submitted to the purchaser at the time of execution of supplies/services for availing GST input credits.

F. <u>STANDARD PAYMENT TERMS OF BHEL-EDN:</u>

PURCHASE ORDERS FOR:	SUPPLY WITH ERECTION & COMMISSIONING	SUPPLY WITH ERECTION SUPERVISION & COMMISSIONING	SUPPLY ONLY
INDIGENOUS PROCUREMENT	a. 90% of basic value + 100% of taxes and freight charges will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later. Balance 10% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C. <u>Note</u>: In case PBG is not furnished, only 80% payment will be released against 90% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	b. 95% of the basic value + 100% of taxes and freight charges will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later. Balance 5% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of commissioning. <u>Note</u>: In case PBG is not furnished, only 85% payment will be released against 95% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	c. 100% of PO value with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later.
IMPORT PROCUREMENT	d. 90% of the basic value will be paid on the 45th day, against usance draft of 45 days, from the date of AWB/BOL on submission of complete set of documents. Balance 10% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C. <u>Note</u>: In case PBG is not furnished, only 80% payment will be released against 90% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	e. 95% of the basic value will be paid on the 45th day, against usance draft of 45 days, from the date of AWB/BOL on submission of complete set of documents. Balance 5% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of commissioning. <u>Note</u>: In case PBG is not furnished, only 85% payment will be released against 95% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	f. 100% of PO value will be paid against usance draft of 45 days from the date of AWB/BOL on submission of complete set of documents.

PURCHASE ORDERS FOR:	**SUPPLY WITH ERECTION & COMMISSIONING**	**SUPPLY WITH ERECTION SUPERVISION & COMMISSIONING**	**SUPPLY ONLY**
HIGH-SEA SALES PROCUREMENT	g. 90% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later. Balance 10% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C. Note: In case PBG is not furnished, only 80% payment will be released against 90% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	h. 95% of the basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later. Balance 5% of basic value (Retention money) will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of commissioning. Note: In case PBG is not furnished, only 85% payment will be released against 95% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	i. 100% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later.

j. Comprehensive Annual Maintenance Contract:

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

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

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

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

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

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

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

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

Note 1: Basic value of Purchase Order mentioned above will include all components of the purchase order and will exclude only taxes, duties, freight, training charges, E&C and AMC charges (wherever applicable). Wherever the Purchase Order is split into import portion and indigenous portion of supply, the retention money will be 10% (where scope includes E&C) or 05% (where scope includes Erection supervision & Commissioning) of both purchase order values put together.

Note 2: If the E&C could not be completed till the end of the Warranty period due to reasons not attributable to the supplier, BHEL will release the retention money to the supplier against Bank Guarantee for equivalent value valid for an initial period of one year.

Note 3: In case of Physical Export projects or wherever services are rendered by foreign suppliers in India, E&C charges (if quoted separately/extra by bidder) will be paid in 15 days from the date of submission of supplementary invoice/ documents against proof of completion of E&C.

Note 4: In case of multiple packages/units in a power plant, payment of retention money/E&C charges will be processed on pro-rata basis.

Note 5: No deviation will be permitted from the duration of Guarantee/Warranty and/or Comprehensive Annual Maintenance Contract period specified in SCC.

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

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

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

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

4. Invoice submitted should be in the format as specified under GST Laws viz., all details as mentioned in Invoice Rules like GST registration number(GSTIN), invoice number with date of issue, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST,IGST mentioned separately, HSN Code / SAC Code etc. Invoice should be submitted in original for buyer plus duplicate for credit availment.

5. Payment of GST to Vendor will be made only if it is matching with data uploaded by the Vendor in GST portal.

6. For invoices paid on Reverse charge basis – "Tax payable on reverse charge basis" to be mentioned on the invoice.

7. In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount will be recoverable from vendor along with interest levied/ leviable on BHEL.

8. In case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law will be recoverable from vendor/contractor along with interest levied/ leviable on BHEL.

9. Vendor should intimate BHEL immediately on the same date of invoicing without any delay.

10. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the supplies, within the calendar month notified by BHEL.

11. Bidders to note that Rules & Regulations pertaining to E-way bill system are to be strictly adhered to, as and when notified by Govt. authorities.

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

Performance bank guarantee (PBG) will be applicable as called in the tender documents. Unless otherwise specified in the SCC, the PBG against performance of the contract shall be valid for a period of 24 months from the date of dispatch of goods + claim period of 03 months, for a value equal to 10 % of the basic value of the purchase order which will include all components of the purchase order and will exclude only taxes, duties, freight, training charges, E&C and AMC charges (wherever applicable).

1. The BG issued in Indian Rupees by Banks in India is to be executed on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Bank issuing the guarantee.
2. No deviation for the duration and value of PBG will be permitted.
3. PBG shall be from any of the BHEL consortium of bankers **(refer Annexure VI)**.
4. PBGs from nationalized banks are also acceptable.
5. PBG should be sent directly by the bank to the dealing executive mentioned in the purchase order located at the address mentioned in the purchase order.
6. PBG should be in the format specified **(refer Annexure VII)**. No deviation to this format will be allowed. However in case BHEL changes the PBG format, bidder shall honor the same.
7. Bank Guarantee should be enforceable in Bangalore.
8. In Case of Bank Guarantees submitted by Foreign Vendors-

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

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

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

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

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

9. Expired BGs / PBGs will be returned only after expiry of the claim period or on completion of the contractual obligation with respect to Purchase Order.
10. PBG shall not be applicable for spares.

I. PROVISONS APPLICABLE FOR MSE VENDORS (MICRO AND SMALL ENTERPRISES) :

Benefits/facilities as applicable for Micro and Small Enterprises (MSEs) shall be available to MSEs registered with Government designated authorities as per the Purchase & Price Preference Policy of the Government subject to them becoming eligible otherwise.
Vendors who qualify as MSE vendors are requested to submit applicable certificates (as specified by the Ministry of Micro, Small and Medium Enterprises) at the time of vendor registration. Vendors have to submit any of the following documents along with the tender documents in the Part-I bid to avail the applicable benefits:

a. Attested copy of valid NSIC certificate or
b. Attested copy of either Entrepreneur's Memorandum part II (EM II) certificate/Udyog Aadhar certificate having deemed validity (five years from the date of issue of acknowledgement in EM II/Udyog Aadhar) or
c. EM II/ Udyog Aadhaar certificate along with attested copy of a CA certificate (Format enclosed at Annexure VIII where deemed validity of EM II certificate/ Udyog Aadhar certificate of five years have expired) applicable for the relevant financial year (latest audited).

Date to be reckoned for determining the deemed validity will be the date of bid opening (Part-I in case of two-part bid and three-part bid).

Documents have to be notarized/attested by a Gazetted officer and must be valid as on the date of part I bid opening for the vendors to be eligible for the benefits applicable for MSE vendors. Please note that no benefit shall be applicable if any deficiency in the above required documents are not submitted before the price bid opening/Reverse Auction. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal.

Bidders to however note the documents that shall be furnished in order to establish credentials as MSE vendor should be as per the extant statutory requirements specified by the Ministry of Micro, Small and Medium Enterprises.

d. PURCHASE PREFERENCE FOR MSE VENDORS:

MSE vendors quoting within a price band of L1 + 15% shall be allowed to supply up to 25% of the requirement against this tender provided

1. The MSE vendor matches the L1 price.
2. L1 price is from a non MSE vendor.
3. L1 price will be offered to the vendor nearest to L1 in terms of price ranking (L2 - nearest to L1). In case of non-acceptance by the MSE vendor (L2), next ranking MSE vendor will be offered who is within the L1 + 15% band (if L3 is also within 15% band).
4. 3% of the 25% will be earmarked for women owned MSEs.
5. 25% of the 25% (i.e., 6.25% of the total enquired quantity) will be earmarked for SC/ST owned MSE firms provided conditions as mentioned in (1) & (2) are fulfilled.

6. In case where no SC/ST category firms are meeting the conditions mentioned in (1) and (2) or have not participated in the tender, the 6.25% of earmarked quantity for SC/ST owned MSE firms will be distributed among the other eligible MSE vendors who have participated in the tender.
7. In case after the bid opening it is seen that no MSE has become L1, then depending on the nature of the item, if it is not possible to split the tendered items/quantities on account of reasons like customer contract requirements of supplying one make for a given project or technical reasons like the tendered item being a system etc., then BHEL would not counter offer the L1 prices even though there may be MSE bidders within the +15% band of L1. Such information that tendered quantity will not be split shall be indicated in the SCC.

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

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

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

a. The Bidder(s)/ Contractor(s) commit(s) to take all measures to prevent corruption and will not directly or indirectly try to influence any decision or benefit which he is not legally entitled to.
b. The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding or any actions to restrict competition.
c. The Bidder(s)/ Contractor(s) will not commit any offence under the relevant Acts. The Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain or pass on to others, any information or document provided by BHEL as part of business relationship.
d. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to the relevant guidelines issued from time to time by Government of India/ BHEL.

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

K. Integrity Pact (IP):

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

1. Shri Arun Chandra Verma,IPS (Retd.)
Address: Flat No. C -1204, C Tower, Amrapali,Platinum Complex,Sector 119, Noida (U.P.)
Ph: +91 8130386387
Email: acverma1@gmail.com
2. Shri Virendra Bahadur Singh,IPS (Retd.)
Address: H. No. B-5/64, Vineet Khand, Gomti Nagar,Lucknow - 226010
Ph: +91 8853760730, 9818377360
Email: vbsinghips@gmail.com

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

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

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

Annexure

Annexure I

Guidelines for Indian Agents

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

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

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

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

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

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

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

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

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

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

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

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Vendor's Signature with Seal

Annexure-A

Guidelines for Indian Agents of Foreign Suppliers

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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ANNEXURE - II
LIST OF INTERNATIONAL GATEWAY AIRPORTS

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

SCHEDULE NO	COUNTRY	CURRENCY CODE	AIRPORT
D01	UK	GBP	LONDON (HEATHROW)
D02	UK	GBP	NEW CASTLE
D03	UK	GBP	OXFORD. CHETLAM
D04	UK	GBP	BRISTOL. WELLINGBOROUGH
D0S	UK	GBP	BIRMINGHAM
DO6	UK	GBP	EAST MIDLANDS
D07	UK	GBP	MANCHESTER
D08	UK	GBP	LEEDS
D09	UK	GBP	GLASGOW
D10	FRANCE	EURO	PARIS (ROISSY) & LYON
D11	SWEDEN	EURO	STOCKHOLM
D12	SWEDEN	EURO	GOTHENBERG & MALMO
D13	ITALY	EURO	ROMA, MILAN
D14	ITALY	EURO	TURIN, BOLOGNA, FLORENCE
D1S	NETHERLANDS	EURO	AMSTERDAM, ROTTERDAM
D16	AUSTRIA	EURO	VIENNA, LINZ, GRAZ
D17	BELGIUM	EURO	ANTWERP, BRUSSELS
D18	DENMARK	DKK	COPENHAGEN
D19	JAPAN	JPY	TOKYO, OSAKA
D20	SINGAPORE	SGD	SINGAPORE
D21	CANADA	CAD	TORONTO
D22	CANADA	CAD	MONTREAL
D23	USA	USD	NEW YORK, BOSTON
D24	USA	USD	CHICAGO
D2S	USA	USD	SAN FRANCISCO, LOS ANGELES
D26	USA	USD	ALANTA, HOUSTON
D27	GERMANY	EURO	MUNICH, KOLN, DUSSELDORF, HANNOVER, HAMBURG, STUTTGART, DAMSTADT, MANIHIEM, NURUMBERG
D28	GERMANY	EURO	FRANKFURT
D29	GERMANY	EURO	BERLIN
D30	SWITZERLAND	SFR	BASLE, ZURICH, GENEVA
D31	SPAIN	EURO	BARCELONA
D32	AUSTRALIA	AUD	SYDNEY
D33	AUSTRALIA	AUD	MELBOURNE
D34	AUSTRALIA	AUD	PERTH
D3S	CZECH	EURO	PRAGUE
D36	HONG KONG	HKD	HONG KONG
D37	NEW ZELAND	NZD	AUCKLAND
D38	RUSSIA	USD	MOSCOW
D39	SOUTH KOREA	USD	KIMPO INTERNATIONAL, INCHEON
D40	FINLAND	EURO	HELSINKI
D41	ROMANIA	EURO	BUCHAREST
D42	NORWAY	EURO	OSLO
D43	IRELAND	EURO	DUBLIN
D44	ISRAEL	USD	TEL AVIV
D45	UAE	USD	DUBAI
D46	OMAN	USD	MUSCAT
D47	EGYPT	USD	CAIRO
D48	TAIWAN	USD	TAIPEI
D49	UKRAINE	USD	KIEV
D50	CHINA	USD	SHANGHAI, SHENZHEN
D51	PHILIPINES	USD	MANILA
D52	MALAYSIA	USD	KUALALUMPUR, PE NANG
D53	CYPRUS	USD	LARNACA
D54	SOUTH AFRICA	USD	JOHANNESBERG, DURBAN
D55	SLOVAKIA	EURO	BARTISLOVA
D56	SAUDI ARABIA	SAR	RIYADH
D57	TURKEY	EURO	ISTANBUL
D58	THAILAND	USD	BANGKOK
D59	BRAZIL	USD	SAO PAULO, RIO DE JANEIRO

ANNEXURE – III

DISCREPANCY IN WORDS & FIGURES – QUOTED IN PRICE BID

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

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

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

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

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

ANNEXURE - IV
Electronic Funds Transfer (EFT) OR
Paylink Direct Credit Form

Please Fill up the form in **CAPITAL LETTERS** only.
TYPE OF REQUEST(Tick one): ________ CREATE ________ CHANGE

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

City:	PINCODE		STATE	

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

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

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

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

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

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

Date:

Authorised Signatory:
Designation: Telephone No. with STD Code

Company Seal

Bank Certificate

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

Date: (……………………………..)
Place: Signature

Please return completed form **along with a blank cancelled cheque or photocopy** thereof to:
Bharath Heavy Electricals Ltd,
Attn:
Electronics Division, Mysore Road,
BANGALORE - 560 026
In case of any Querry, please call concerned purchase executive.

ANNEXURE - V

PRESENT PROCEDURE FOR SALE IN TRANSIT (HIGH SEA SALES)

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

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

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

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

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

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

7. **ORIGINAL PACKING LIST.**

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

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

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

Annexure-VI

BHEL MEMBER BANKS (LIST OF CONSORTIUM BANKS)

BANK GUARANTEE (BG) SHALL BE ISSUED FROM THE FOLLOWING BANKS ONLY:

	Nationalised Banks		Nationalised Banks
1	Allahabad Bank	19	Vijaya Bank
2	Andhra Bank		**Public Sector Banks**
3	Bank of Baroda	20	IDBI
4	Canara Bank		**Foreign Banks**
5	Corporation Bank	21	CITI Bank N.A
6	Central Bank	22	Deutsche Bank AG
7	Indian Bank	23	The Hongkong and Shanghai Banking Corporation Ltd. (HSBC)
8	Indian Overseas Bank	24	Standard Chartered Bank
9	Oriental Bank of Commerce	25	J P Morgan
10	Punjab National Bank		
11	Punjab & Sindh Bank		**Private Banks**
12	State Bank of India	26	Axis Bank
13	State Bank of Hyderabad	27	The Federal Bank Limited
14	Syndicate Bank	28	HDFC Bank
15	State Bank of Travancore	29	Kotak Mahindra Bank Ltd
16	UCO Bank	30	ICICI Bank
17	Union Bank of India	31	IndusInd Bank
18	United Bank of India	32	Yes Bank

Note:

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

Annexure-VII

BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

NAME

& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

In consideration of Bharat Heavy Electricals Limited (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at ____________________[1] through its Unit at......................(name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) with its registered office at________[2] hereinafter referred to as the ' Vendor / Contractor / Supplier ', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No.......................dated ....[3] valued at Rs...........[4] (Rupees ----------------------)/FC.................(in words..........) for ....[5] (hereinafter called the 'Contract') and the Vendor / Contractor / Supplier having agreed to provide a Contract Performance Bank Guarantee, equivalent to ......% (.... Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,

we, ..., (hereinafter referred to as the Bank), having registered/Head office at .... and inter alia a branch at .... being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer any sum or sums upto a maximum amount of Rs -------------------[6] (Rupees ----------------------) without any demur, immediately on first demand from the Employer and without any reservation, protest, and recourse and without the Employer needing to prove or demonstrate reasons for its such demand.

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

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

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

We 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 guarantee period as per the terms of the Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

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.................................. [7] and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Vendor / Contractor / Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the .... [8]we shall be discharged from all liabilities under this guarantee thereafter.

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

Notwithstanding anything to the contrary contained hereinabove:

a) The liability of the Bank under this Guarantee shall not exceed............................. [6]
b) This Guarantee shall be valid up to .... [7]
c) Unless the Bank is served a written claim or demand on or before ____________ [8] all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

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

For and on behalf of
(Name of the Bank)

Dated..................
Place of Issue..................

[1] NAME AND ADDRESS OF EMPLOYER I.e Bharat Heavy Electricals Limited

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

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

[4] CONTRACT VALUE

[5] PROJECT/SUPPLY DETAILS

[6] BG AMOUNT IN FIGURES AND WORDS

[7] VALIDITY DATE

[8] DATE OF EXPIRY OF CLAIM PERIOD

Annexure – VIII
(Applicable only for MSE suppliers)
Certificate by Chartered Accountant on Letter Head

This is to certify that M/s ....(hereinafter referred to as `Company') having its registered office at .... is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part-11 .... dtd ...., Category: .... (Micro/Small) (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the latest audited financial year...................... as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722 (E) dated October 5, 2006: **Rs**...................Lacs.

2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: **Rs**. ....Lacs.

The above investment of Rs. ....Lacs in within permissible limit of Rs.......................Lacs for...Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/ Small) (**Strike off which is not applicable**) and the date of graduation of such enterprise from its original category is .... (dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name:

Membership Number:

Seal of Chartered Accountant

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 VCB for ICF - CHENNAI TENDER No: BSY0000049 ________________. 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 Independent External Monitor(s), 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. He commits himself to observe the following principles during his 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 will 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 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 from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.

4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

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

5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors

6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors.

6.2 The Principal will disqualify from the tender process all bidders who do not sign this 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 Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

8.2 The Monitor is 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 Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.

8.4 The Principal will provide to the Monitor 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 Monitor the option to participate in such meetings.

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

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

8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.

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

8.9 IEM 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 organization should be looked into by the CVO of the concerned organisation.

8.10 If the Monitor has 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 Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

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

Section 9 - Pact Duration

9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.

9.2 If any claim is made/ lodged during currency of IP, 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 agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement 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 agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

B. Savitha

ಬಿ. ಸವಿತಾ, ಉಪ-ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು/ಸಿ.ಇ.-ಎಮ್ಎಮ್-ಪಿ.ಆರ್.

For & On behalf of the Principal

[illegible]म–पीआर

B. SAVITHA, DY. GENERAL MANAGER / CE-MM-PR

BHEL-EDN. MYSORE ROAD, BANGALORE - 560 026

(Office Seal)

For & On behalf of the Bidder/ Contractor

(Office Seal)

Place: Bangalore.

Date: 18/X/19.

Witness: Nagendra

(Name & Address) Nagendra R
BHEL-EDN, Bangalore

Witness: ____________________

(Name & Address) ____________________

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

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

CE: PR: 003- Rev 01

SPECIAL COMMERCIAL CONDITIONS OF CONTRACT

Reference is brought to BHEL's Instructions to Bidders (Document Ref: CE: PR: 001- Rev 01) and General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 01). These documents along with required annexures are available in our website: ____.These two documents along with Special Conditions of Contract annexed to this RFQ will form an integral part of the contract as and when the RFQ culminates into a Purchase Order / Contract.

RFQ No: BSV00000049 **RFQ Date: 21.10.2019**

Due Date: As per eps **Customer/Project: ICF CHENNAI**

Item Description: VCB SYSTEM

TYPE OF BID: **THREE PART BID (PQR+ TECHNICAL+ PRICE BID)**
–

Purchase Executives: Clarifications with regard to the tender shall be addressed to purchase officers whose e-mail IDs are given below: **savitha@bhel.in** or nagendrar@bhel.in

Submission of documents post PO viz., drawings /data sheet etc. as indicated in Cl: 04 of GCC: Within 3 weeks from the date of receipt of Purchase Order. Delay in submission of complete set of specified documents in NIT, will attract Penalty as per GCC Clause no.:04.a.

Splitting of tendered quantity to MSE vendors: The tendered quantity will /will not be split to MSE vendor/s subject to submission of relevant documents by vendors. Refer clause I of Instructions to Bidders ~~for~~ conditions applicable and for information on documents to be submitted.

Destination: a) For Indigenous scope of supply, items are to be directly despatched to BHEL's Site Office or Stores located at/near **CHENNAI in T.N state, India**. Consignee details, will be issued by BHEL along with Despatch Clearance.

b) For Imported scope of supply and high sea sale, destination is_Bangalore_. In case of shipment by sea, port of discharge will be any port in India seaport and port of delivery shall be ICD-Bangalore

Project Benefits:
Imported scope of supply:

~~a) DEEC / SEZ/EPCG/DFIA/ Physical Export contract: Eligible for "NIL" Basic Customs Duty.~~
~~b) Project Imports: Eligible for Concessional Basic Custom Duty for both the projects.~~
~~c) Basic Custom duty and Cess on Basic Custom duty are reimbursable by customer.~~
d) Merit Duty is applicable.

Terms of Delivery:

- **Indigenous scope of supply:**

  Ex-works < (station of dispatch)> (including Packing & Forwarding charges but excluding Taxes & Duties).

- **Imported scope of supply:**

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

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

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

a. GSTIN (no.) of place of supply: _________________________

b. HSN (Harmonized System of Nomenclature) code: _____________________
Applicable tax and Rate: ___________&___________

c. SAC (Service Accounting Code) no.:____________________________
Applicable tax and Rate: ___________&___________

d. If service is also involved, GSTIN (no.) of place of supply of service: ______________________

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

SL NO.	TERMS	BHEL ACCEPTABLE TERM	BIDDER'S CONFIRMATION	REMARKS, if any
01	**Reverse Auction**	Will be intimated separately to qualified bidders after finalization of techno-commercial evaluation. Non-acceptance to participate in RA may result in non-consideration of the bid, in case BHEL decides to go for RA. In case BHEL does not resort to Reverse Auction, the price bids and price impacts (if any) shall be opened as per BHEL's standard practice.	**AGREE**	
02	**Delivery Period**	Pls refer the delivery clause in page 3 of 3 of this SCC (*) Delay in contractual delivery will attract Penalty as per GCC Clause no.:04.b.	**AGREE** ……………. weeks	
03	**Terms of Payment at the time of material supply**	Refer Clause "**F**" of Instructions to Bidder for BHEL standard Payment terms and loading factors applicable for non-compliance against payment terms: **Indigenous Scope:** **a) Supply with Erection Supervision & Commissioning** ____ __________ __________ **Imported Scope:** **a) Supply with Erection Supervision & Commissioning** ____ __________ __________ **High-Sea sales:** **a) Supply with Erection Supervision & Commissioning** ____ __________ __________ ______ _________________________________	**AGREE**	

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

(1) **Validity:** The offer will be valid for a period of _**90**_ days from the date of part-I bid opening and in case of Negotiation/ Counter-offer/Reverse Auction, price validity will apply afresh for a period of _**60**_ days from the date of according final price by bidder (or) upto original validity period, whichever is later.

(2) **Guarantee/ Warranty: 36** months from the date of dispatch of goods or 24 months from the date of commissioning of goods, whichever is earlier.

(3) **Performance Bank Guarantee (PBG):** PBG will be applicable for a period of 36 months from the date of dispatch of goods + claim period of **03** months, for a value equal to 10% of the basic value of the purchase order. Refer Clause "H" of Instructions to Bidders. Also note that PBG should be in the format specified in Annexure VII of ITB and no deviation to this format will be allowed.

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

(4) **Despatch Documents:** Complete set of despatch documents (original + 1 photocopy set) as per Purchase Order shall be forwarded to Purchase Executive/BHEL directly. Depending upon the project/customer demands, despatch documents may include one or more documents from the following: Invoice (02 sets of original), Lorry Receipt (L/R), Packing List, Air Way Bill (AWB)/Bill Of Lading (BOL), Copy of High Sea Sales (HSS) agreement, Country of origin certificate, NIL Short Shipment Certificate, Original Performance Bank Guarantee (directly from issuing bank to BHEL), insurance intimation letter, POD (Proof of Delivery) on L/R.

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

One set of Invoice, Packing List and L/R or AWB shall be e-mailed/faxed immediately to BHEL-EDN after despatch.

(5) **Freight Charges (for indigenous scope of supply):** Freight charges shall be to vendor's account. Vendor to quote reasonable lump sum Freight charges separately, with applicable tax in priced offer.

(6) Any additional commercial term or deviation in commercial term, if sought by any vendor, should be clearly brought out in this document (special commercial conditions of contract). Any additional commercial term or deviation in commercial term mentioned anywhere else shall be ignored and not be considered for evaluation.

(7) **Evaluation criteria for tendered item/s:**

~~(a) Item-wise evaluation of tendered item.~~

(or)

(b) Items will not be split on item-wise lowest offer. Items shall be evaluated and procured as a package .

(c) Refer the offer evaluation as per Section 'A' of General instruction to bidder. (Page No. 4 of this NIT)

(8) **Integrity Pact:** Execution of Integrity Pact is applicable for this tender (Refer clause "K" of Instructions to Bidders)

Details of IEM for this tender are mentioned in ITB.

(*) Deliver schedule for all 106 VCBs shall be as below

a) 4 number of VCB to be made ready and vendor to submit TCs for prototype test within 8 weeks from the date of MC/Document approval.

b) Balance quantity in staggered delivery (8 VCBs per months).

With this, we hereby confirm that all the terms & conditions as indicated in Instructions to Bidders (Document Ref: CE: PR: 001- Rev 01) & General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 01) are accepted without any deviation.

Vendor's Signature with Seal

Note B:

1. Any technical or commercial clarification for this tender can be raised within one week of floating tender. No clarification will be entertained by BHEL after given cutoff date.
2. Vendor has to mandatorily give price breakup for each item of scope of supply as per BOM of specification in price bid.
3. Refer packing & Inspection conditions below in page No.79

INSPECTION TERMS :

INSPECTION OF PROTOTYPE BY RDSO/ICF. INSPECTION OF REGULAR SUPPLY BY ICF ON RECEIPT OF MATERIALS AT ICF AGAINST FIRMS ORIGINAL SIGNED WORKS TEST CERTIFICATE.

PACKING CONDITION :

Each bale or Package delivered under the contract shall be marked by the contractor at his own expense. Such marking shall be distinct (all previous irrelevant marking being carefully obliterated)and shall clearly indicate the description and quantity of the stores, the name and address of the consignee, the gross weight of the package and the name of the contractor with a distinctive number or mark sufficient for the purpose of identification. All the markings shall be carried out with such material as may be found satisfactory by the Inspecting Officer as regards quickness of drying fasteners and indelibility.

1 The items tendered will have to undergo arduous transportation before reaching the destination and will have to be stored and handled in tropical climatic conditions (including monsoons) before they are put to the actual use. It is, therefore, imperative that packing for every item is decided and carried out by taking into consideration, *inter-alia*, the above vital factors, so as to eliminate damage/deterioration of items in transit/transhipment/handling or during storage.

2 The packing advices should bring out the weight, dimensions and size of each bundles/ package. Where it is not possible to give weight of the bundles/packages, the contractor must indicate the volume of the bundles/packages, the number of pieces per bundle/package, number of bundles/ packages, and total weight of the items supplied.

.3 Where the materials are shipped in bundles/packages the pieces in each bundle/package should be of uniform sizes to facilitate quick acceptance and payment. The number of pieces in each bundle/ package should also be the same.

4 Apart from the above, firm has to comply the following special condition for the items procured in sets where each set consists of multiple items/assemblies/sub-assemblies.

a).The supplier will submit the packing list for each consignment truck-wise and paste / print / paint labels on individual items mentioning the item description and reference as mentioned in packing list to facilitate ease of receipt and accountal at depot.

b).To facilitate ease of identification and acknowledgement of receipt, supplier should submit photo-album(hard copy as well as soft copy) of all the items constituting a set indicating the name of individual part. This photo-album may be submitted only once which will help depot officials in identifying the items on receipt thereof.

c).Wherever feasible, supplier will pack items set-wise to facilitate receipt and accountal of materials. As far as possible, packing should be done in such a way that it will facilitate easy stacking and vertical space utilisation.

d). Supplier should also indemnify the depot officer for correctness of supply of items in sets as per packing list as per the format given below.