

Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division
PB No.2606, Mysore Road, Bangalore-560026, India

E-TENDER

Quotations are invited under two part bid system for Supply and I&C of 5.3 MVA Inverter Transformers for NTPC 20MW Solar PV Project at Gandhar, Gujarat through e-procurement route.

RFQ NO and date	RAJBOS0061 dated 22.09.2020 (E-tender)
RFQ due date & time	25.09.2020 up to 13.00 hrs (IST)
Date, Time & Venue of Part-I Bid Opening	25.09.2020 after 13.30 hrs (IST) (E-tender) – Website - https://bhel.abcpurchase.com
Date, Time & Venue of Price Bid opening	Will be intimated later for technically accepted vendors
Address for Communication & Contact Person in BHEL	Mr. Rajesh S (09845634534)/ Mr. Vivek Yadav (09449039232), SC&PV MM Department, BHEL Electronics Division, PB NO 2606, Mysore road, Bangalore-560 026. INDIA Email: s.rajesh@bhel.in vivekyadav@bhel.in Telephone number: +91 80 26989637

RAJBOS0061 – Pre Qualification Criteria

BHEL-EDN is executing Solar PV projects of 20 MW capacity for NTPC on EPC basis. The requirement for Inverter transformers is being floated as open tender. The project requirement is as below-

S.No	Item Description	Estimated Quantity
1	5.3 MVA Inverter Transformer	5 Nos

Pre-Qualification Criteria (PQC) is as below:

- 1) The bidder should be an OEM and should have supplied and commissioned at least four number of minimum rating of 5 MVA, 3 phase, 3 or more windings inverter duty transformer with HV winding of minimum 33kV grade for solar PV plants in India during the past 3 years with reference to the date of opening of Part-1 bid. As an evidence, vendor shall submit PO copies along with the commissioning/performance certificate from respective clients.
- 2) During technical evaluation, Credentials of vendors will be submitted to end customer (M/s NTPC) for approval. Only the price bids of those vendors, **who are technically qualified and Approved by end customer** (M/s NTPC) before price bid opening, will be considered for further procurement processing.

REQUEST FOR QUOTATION

	BHARAT HEAVY ELECTRICALS LIMITED Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: RAJBOS0061 RFQ DATE : 22.09.2020	Due Date/Day: 25.09.2020 FRI Time : 13:00 HRS Tender Box : Reception Area Opening Venue: NEW ENGG. BLDG
MMI:PU:RF:003			
(address for communication) :		(for all correspondence) Purchase Executive : RAJESH SHELMEDE Phone : 26989637 Fax : 00918028520135 E-mail: s.rajesh@bhel.in	

SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	PS0679086536 Supply of 5.3 MVA Transformer * HSN/SAC : 8504 Test Certificate	5	NO	4 1	01.12.2020 01.12.2020
2	PS0679086544 Supply of Spares of 5.3 MVA Transformer * HSN/SAC : 8504 Test Certificate	1	ST	1	01.12.2020
3	PS0679086552 I&C of 5.3 MVA Transformer * HSN/SAC : 7308	4	AU	4	01.12.2020

Total Number of Items - 3

- 1.
- 2.

TWO PART BID - SUBMIT TECHNICAL AND PRICE BID IN SEPARATE SEALED COVERS

NOTES:

1. This RFQ is governed by:
 - a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (**RFQ-PO Terms & Conditions**)
 - b) Any other specific Terms and Conditions mentioned.
 2. Bidders / Representatives who would like to be present during opening of offers are required to furnish authorization letter for the same.
- * The HSN/SAC no mentioned against the line items in the RFQ are indicative only.

For and On behalf of BHEL.

RAJESH SHELMEDE
Semiconductors & Pho

1 OF 1

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV - xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 1 OF 20

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**PURCHASE SPECIFICATION
FOR
SUPPLY AND COMMISSIONING SUPPORT
OF
ONAN TYPE, 3-PHASE, 3-WINDING, 5.3MVA, 33KV / xxxV - xxxV
INVERTER DUTY TRANSFORMER**

Sheetal Prasad

Prachi

0	12-06-2020	SHEETAL PRASAD	PRACHI RAO V
Revision	Date	Prepared	Checked & Approved

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 2 OF 20

1.0 INTRODUCTION

This document details the technical specifications, supply conditions, erection and commissioning and post-commissioning requirements for ONAN Outdoor type, 5.3 MVA, 33kV/ xxxV-xxxV, 3-phase, 3-Winding, Inverter duty transformers for Solar PV grid connected power plants.

2.0 LIST OF ITEMS

2.1	ONAN type, 3-phase, 3-winding, Inverter Duty Transformer with two identical LV windings and one HV winding - Rating 5300 kVA 1) HV Voltage: 33kV 2) LV voltage : xxxV-xxxV ** 3) Vector group: Dyn11yn11 (Floating Neutral) ** xxx Volts – Value shall vary between 550V and 690V depending on the output of the Inverter. Exact voltage shall be informed during detailed engineering. Price quoted by vendor shall be firm irrespective of the LV Voltage	Qty as per BHEL tender requirement																																				
2.2	Spares shall be offered as per list below: <table border="1"> <thead> <tr> <th>#</th><th>Spares(O&M)</th><th>Qty</th></tr> </thead> <tbody> <tr> <td>1</td><td>HV Bushings with metal parts and gaskets</td><td>1 sets (3 Nos)</td></tr> <tr> <td>2</td><td>LV Bushings with metal parts and gaskets</td><td>1 set (6 Nos)</td></tr> <tr> <td>3</td><td>LV Neutral Bushing</td><td>1 set (2 Nos)</td></tr> <tr> <td>4</td><td>Set of valves (Each set shall represent complete qty of different types of valves used in one transformer. Total list of valves shall be indicated by vendor during detailed Engg)</td><td>1 set</td></tr> <tr> <td>5</td><td>Pressure Relief Device with trip contacts</td><td>1 No</td></tr> <tr> <td>6</td><td>Winding temperature indicator with alarm & trip contacts along with 4-20mA transmitter</td><td>1 No</td></tr> <tr> <td>7</td><td>Oil temperature indicator with alarm & trip contacts along with 4-20mA transmitter</td><td>1 No</td></tr> <tr> <td>8</td><td>Buchholz Relay (complete unit)</td><td>1 No</td></tr> <tr> <td>9</td><td>Magnetic Oil Level Gauge (MOG)</td><td>1 No</td></tr> <tr> <td>10</td><td>Set of Gaskets (Each set shall represent complete qty of different types of gaskets used in one transformer. Total list of gaskets shall be indicated by vendor during detailed Engg)</td><td>1 set</td></tr> <tr> <td>11</td><td>Transformer Oil</td><td>10 % of total quantity of extra oil required for all the transformers</td></tr> </tbody> </table>		#	Spares(O&M)	Qty	1	HV Bushings with metal parts and gaskets	1 sets (3 Nos)	2	LV Bushings with metal parts and gaskets	1 set (6 Nos)	3	LV Neutral Bushing	1 set (2 Nos)	4	Set of valves (Each set shall represent complete qty of different types of valves used in one transformer. Total list of valves shall be indicated by vendor during detailed Engg)	1 set	5	Pressure Relief Device with trip contacts	1 No	6	Winding temperature indicator with alarm & trip contacts along with 4-20mA transmitter	1 No	7	Oil temperature indicator with alarm & trip contacts along with 4-20mA transmitter	1 No	8	Buchholz Relay (complete unit)	1 No	9	Magnetic Oil Level Gauge (MOG)	1 No	10	Set of Gaskets (Each set shall represent complete qty of different types of gaskets used in one transformer. Total list of gaskets shall be indicated by vendor during detailed Engg)	1 set	11	Transformer Oil	10 % of total quantity of extra oil required for all the transformers
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		PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER		PS-439-1336 REV NO: 00 PAGE : 3 OF 20
	a) Vendor shall provide a complete list of spares showing item-wise unit price, quantity and total price. b) BHEL reserves the right in selection and inclusion of the spares in the final scope of supply.			
2.3	Installation and commissioning support for the transformers at site: BHEL scope of activities at site for installation and commissioning: (1) Movement and positioning of transformers on their respective foundations. BHEL shall arrange all necessary labour, machinery and tools. (2) Erection / assembly of transformer fittings and accessories. BHEL shall arrange all necessary labour, machinery and tools. (3) Laying of LV/HV cables, erection of HV termination kits and cable terminations at the LV/HV cable boxes. BHEL shall arrange all necessary labour and tools. Supply of cables and accessories (glands, lugs, nuts, washers in BHEL scope. Vendor scope of activities at site for commissioning: (1) Supervision of erection / assembly of transformer fittings and accessories including marshalling box wiring. This shall include providing technical guidance to BHEL erection team wherever required. (2) Commissioning / service engineer(s) shall be available at site at the time of commissioning of the power plant. All necessary guidance / support in overcoming technical problems (if any) related to the transformers. A single lump-sum price on per-transformer basis shall be offered. The lump-sum price shall include all the costs that will be incurred by the vendor towards the above activities including travel, boarding, lodging and any other contingency expenses.			1 AU per transformer 1 AU (Activity Unit) = I&C Support for 1 No. transformer
2.4	Service during Warranty Vendor shall enclose, along with technical bid, the complete scope, terms and conditions of the warranty. During the warranty period, whenever a technical problem is encountered with transformers, BHEL will report the same to the vendor. All parts of the transformers shall be covered under warranty. Replacement of all defective material during warranty period shall be in scope of the vendor. Vendor shall ensure that the problem is attended to by their service engineer within two days from the date of reporting.			

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 4 OF 20

3.0 TECHNICAL SPECIFICATIONS

#	Technical parameter	BHEL specification	
1	Transformer type	Outdoor, oil-immersion type ONAN, Inverter Duty. Inverter Transformer shall be designed for at least 5% total harmonic distortion (THD)	
2	IP class	Transformer, including the cable box and marshalling box shall be of IP55 or better.	
3	Application	Grid-connected solar photovoltaic power plant.	
4	Governing Standards	Power Transformer	IS: 2026, IS: 6600, IEC:60076,CBIP
		Fittings and Accessories	IS: 3639
		Insulating Oil	IEC: 60296
		Bushings	IS: 2099, IEC: 60137, IS 3347, IS 12676
		Bushing CTs	IS:2705 , IEC 60185
		Degree of protection	IS: 2147, IEC 76
		Tests and tolerance of guaranteed particulars	IS: 2147, IEC 76
		Buchholz relay	IS: 3637
		Electrical insulation classified by thermal stability	IS: 1271,IEC 85
		Climate proofing	IS: 3202, IEC 354
	Indian Electricity Act 2003, BEE Guidelines & CEA regulations/notifications		
5	Rating in KVA	5300 kVA	
6	No. of phases	3	
7	Frequency	50 Hz, +/- 3%	
8	Vector Group	Dyn11yn11 (Floating neutral)	
9	HV winding	One 3-phase winding with Delta connection. HV voltage: 33KV	
10	LV windings	Two independent 3-phase windings, each with Star connection. LV voltage: as defined at Cl. 2.1. Each winding shall have an identical and equal rating (each winding shall be rated at 50% of overall transformer rated kVA). Design shall be such that transformer shall have identical performance for both the LV windings. Even when one LV winding is not fed from solar generation side, performance of the other (operational) LV winding shall remain unaffected.	
11	Neutral on LV side (Floating neutral)	Neutral terminals of both LV windings shall be brought out separately through bushings.	

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV - xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 5 OF 20

12	Winding material	Electrolytic grade Copper/Aluminum for both HV and LV windings.
13	Winding Insulation	Class A
14	Rated Thermal Short time current withstand time	25kA for 2 sec
15	% Impedance on principal tap, at 2.65 MVA base at 75deg C and 50 deg C	HV - (LV1 + LV2): 7% HV - LV1 / LV2 : 7 % LV1 – LV2 : 11% (min) Tolerance shall be as per IS 2026
16	Termination HV/LV/Orientation	Air insulated cable box with disconnecting chamber, for both HV and LV sides. Cable box / Cable box / 180°.
17	Cable entry on HV side	- Bottom entry of cables. - Cable size: 1 run per phase of 1Cx240 sq-mm, 33kV grade, aluminum conductor, armoured, XLPE insulation, PVC sheath as per IS: 7098. - Cables, lugs, glands, termination kits etc shall be in BHEL SCOPE. - Vendor shall provide hole on the bottom-side gland-plate of HV side cable box for cable entry. The minimum length provided for terminating 33KV XLPE cable shall be 1000MM from cable gland plate to cable lugs in the cable boxes. - Cable OD will be intimated to the vendor at the time of manufacturing. -
18	Cable entry on LV side	- Three wire system. No neutral wire - Bottom entry of cables - Cable size: 6 runs per phase of 1Cx400 sq.mm, aluminum conductor, armoured, XLPE insulation, PVC sheath as per IS: 7098. - Cables, lugs, glands etc shall be in BHEL SCOPE - Vendor shall provide holes in the busbars and on the bottom-side gland-plate of LV side cable box for placement of glands. The minimum length provided for terminating LV cable from cable gland plate to cable lugs in the cable boxes shall be finalised during detailed engineering. - Cable OD shall be informed to vendor during drawings approval by BHEL. Cables shall enter the cable box straight upwards and get connected to the bus bars. After entry into cable box, cables shall not undergo any bends or turns. Cables shall enter the cable box straight upwards and get connected to the bus bars. After entry into cable box, cables shall not undergo any bends or turns.



**PURCHASE SPECIFICATION FOR
SUPPLY AND COMMISSIONING SUPPORT OF
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INVERTER DUTY TRANSFORMER**

PS-439-1336

REV NO: 00

PAGE : 6 OF 20

19	Tapping on HV winding	Off circuit tap changer (OCTC) switch with tap positions range from -5% to +5% in steps of 2.5%.
20	Loading Capability	Continuous operation at rated MVA on any tap with voltage variation of +/-10%. Transformer shall be capable of being loaded in accordance with IS: 6600 / IEC 60076-7 upto a load of 150%. There shall be no limitation imposed by bushings etc. or any other associated equipment.
21	Ambient temperature	Max 50 deg C
22	Temperature rise	For top oil: Max.50 deg C by thermometer method. For winding: Max. 55 deg C by resistance method. Both rises shall be over an ambient temperature of 50 deg C irrespective of tap position.
23	Flux density	Not to exceed 1.9 Wb/sq.m at any tap position with +/-10% voltage variation from voltage corresponding to the tap. Transformer shall also withstand following over-fluxing conditions due to combined voltage and frequency fluctuations: a) 110% for continuous rating b) 125% for at least one minute c) 140% for at least five seconds Vendor shall furnish over-fluxing characteristics upto 150% during detailed engg. The transformer shall also be capable of withstanding without damage during the time, for a duration of at least two seconds the stresses caused by short circuit limited only by the transformer impedance with 110% rated voltage maintained at source end.
24	Air Clearances	As per CBIP
25	Harmonics	Shall be designed to suppress harmonics especially 3rd & 5th. Inverter Transformer shall be designed for at least 5% total harmonic distortion (THD)
26	Noise level	As per NEMA TR-1 standard
27	Highest system voltage	LV side: 3.6kV HV side: 36 kV
28	Insulation Class (Winding and bushing)	As per relevant IS / IEC standard LV side winding and bushing insulation class shall be of at least 3.6 kV
29	Insulation levels Rated Lightning Impulse withstand voltage / Short	As per IEC 60137



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INVERTER DUTY TRANSFORMER**

PS-439-1336

REV NO: 00

PAGE : 7 OF 20

	duration power frequency withstand voltage					
30	Painting	PARTS NAME	TYPE OF PAINT	NO. OF COATS	TOTAL DFT	
		Inside of tank and accessories (except M Box)	Oil & heat resistant fully glossy white	One coat	At least 30 micron	30
		External surface of transformer and accessories including M Box (except radiators)	Chemical resistant epoxy zinc phosphate primer, MIO (Micaceous iron oxide) as intermediate paint followed by polyurethane finish paint (RAL 5012 Blue)	One coat each	At least 100 micron	100
		External Radiator surface	Anticorrosive primary paint followed by high quality full glossy outer finish paint (RAL 5012 Blue)	Two coats each	At least 100 micron	100
		Internal Radiator surface	Hot oil proof, low viscosity varnish and subsequent flushing with transformer oil	---	---	
		Internal surface of M Box	Chemical resistant epoxy zinc phosphate primer followed by chemical and heat resistant epoxy enamel white paint	Two coats each	Not less than 100 micron	
31	Constructional features	As per clause 4.0 of this specification				
32	Fittings and accessories	As per clause 5.0 of this specification				
33	Provision of shield	Inverter Transformer shall have Copper/Aluminum Shield winding between LV & HV windings. Each LV winding must be capable of handling non-sinusoidal voltage with voltage gradient as per relevant applicable standards and Inverter manufacturer recommendation. Also each shield winding shall be taken out to tank with two separate connection from shield to bushing with proper support with 2 nos. of 3.6 kV shield bushings and same shall be brought down along with support insulator from tank & copper flat up to the bottom of the tank for independent grounding.				
34	No load current at rated voltage and frequency	Vendor to indicate value (%)				

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 8 OF 20

35	Efficiency at 75°C at UPF	Minimum 98.5% at full load. Vendor to indicate value	
36	Maximum Efficiency (%) and load at which it occurs (kVA)	Vendor to provide details	
37	Overall dimension in mm Length x Breadth x Height	Vendor to provide details	
38	Oil capacity (in Litres)	Vendor to mention Oil capacity	
39	Weight of transformer (kg)	Vendor to provide details	
40	Minimum creepage distance	35mm/ kV	

4.0 Constructional features and details of transformer components

4.0	Governing standard	IS: 2026, IEC 60076 and IS: 3639 or equivalent international standard.
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4.1 Tank

4.1.1	The transformer tank and cover shall be fabricated from high grade low carbon plate steel of tested quality. The tank and cover shall be of welded construction and there should be provision for lifting by crane.
4.1.2	At least two adequately sized inspection hole(s) with welded flange(s) and bolted cover(s) shall be provided, one at each end of the tank. The inspection hole(s) shall be sufficient size to afford easy access to the lower ends of the bushings, terminals etc.
4.1.3	The interior of the tank shall be cleaned by sand blasting and painted with two coats of heat resistant and oil insoluble insulating varnish of white shade.
4.1.4	All bolts and nuts exposed to atmosphere shall be galvanized. All bolted connections to the tank shall be fitted with suitable oil-tight gaskets that shall give satisfactory service under the operating conditions for complete life of the transformer, if not opened for maintenance at site.
4.1.5	Transformer tank shall be mounted on bi-directional rollers for rail gauge suitable as per IS / CBIP. Suitable locking arrangement shall be provided to prevent accidental movement of transformer. Tank shall also be provided with lifting lugs and minimum four jacking pad.
4.1.6	The tank together with radiators, conservator, bushings and other fittings shall be designed to withstand the following conditions without permanent distortion: (i) Full vacuum (mm of Hg – value as per latest CBIP Manual), for filling with oil by vacuum. Internal gas pressure of 0.35 Kg/cm ² (5 lbs/sq.in) with oil as at operating level. (ii) The transformer shall have conservator tank of adequate capacity to accommodate oil preservation system and volumetric expansion of total transformer oil. The

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 9 OF 20

	conservator shall be bolted into position so that it can be removed for cleaning purposes. (iii) The conservator shall be of single compartment type. The top of the conservator shall be connected to the atmosphere through indicating type cobalt free silica gel breather (in transparent enclosure). Silica gel shall be isolated from atmosphere by an oil seal. (iv) The tank cover shall be suitably sloped so that it does not retain rain water. The material used for gaskets shall be cork, neoprene or approved equivalent.
4.1.7	The adverse effect on life of transformer due to cloud intermittency and solar generation loading cycle must be compensated through suitable design.
4.1.8	The thermal design of Inverter Transformer needs to consider the temperature dependent performance of the inverter. It is to in accordance with Inverter output and under worst condition it should not limit inverter output. (Temperature dependent performance of the inverter data will be provided during detailed engineering stage).
4.1.9	The multi-winding transformer needs to be designed for long term operating conditions with asymmetrical load on LV side i.e., in case three winding design, the transformer needs to operate reliable with only one inverter supplying power to only one LV winding.
4.1.10	Contacts from Inverter transformer and Auxiliary transformer fittings/protection devices shall be wired for tripping of inverter transformer Circuit Breaker. Detailed scheme regarding same shall be finalized during detailed engineering.

4.2 Core

4.2.1	The magnetic circuit shall be of core type. The core shall be constructed from high grade, non-ageing, cold rolled, super grain oriented silicon steel laminations (CRGOS) equivalent to M4 grade steels or better.
4.2.2	The insulation structure of the core to clamp plates shall be such that it withstands a voltage of 2kV (rms) for one minute in air.
4.2.3	Adequate lifting lugs will be provided to enable the core & windings to be lifted.

4.3 Windings

4.3.1	Windings shall be of electrolytic grade copper/Aluminum free from scales & burrs.
4.3.2	Windings shall have uniform insulation.
4.3.3	Tapping shall be so arranged as to preserve the magnetic balance of the transformer at all voltage ratios.
4.3.4	The completed core and coil assembly shall be dried in vacuum and shall be immediately impregnated with oil after the drying process to ensure elimination of air and moisture within the insulation.
4.3.5	Windings shall be made in dust proof and conditioned atmosphere.

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 10 OF 20

4.4 Internal earthing

4.4.1	The frame work and clamping arrangements of core and coil shall be securely earthed inside the tank by copper strip connection to the tank.
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4.5 Bushings

4.5.1	Bushings shall be supplied with terminal connector clamp suitable for connecting the cables. Bushings below 52 kV shall be oil communicating type with porcelain insulator. No arcing horns to be provided on the bushings. Inverter Transformer LV bushing palms shall be silver/tin plated. Bushing CTs Shall be of adequate rating for protection as required, WTI (WTI CT applicable for transformer above 50 KVA) etc. All CTs (except WTI) shall be mounted in the turret of bushings, mounting inside the tank is not permitted. All CT terminals shall be provided as fixed type terminals on the M. Box to avoid any hazard due to loose connection leading to CT opening. In no circumstances Plug In type connectors shall be used for CT.
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4.6 Cables boxes and disconnecting chambers

4.6.1	Cable boxes shall be supplied with gland plates having holes to suit BHEL specified cables.
4.6.2	Cable boxes / disconnecting chambers shall be provided with body earth terminals.
4.6.3	LV cable boxes shall be provided with necessary LV bushings, bus bars, bus bar supports for making cable terminations. LV neutral cable box- separate cable box shall be provided for each LV neutral
4.6.4	HV cable boxes shall be segregated air insulated type & shall be of sufficient size to accommodate Employer's cable & termination. Phase segregation shall be achieved by insulating barriers (for 3.3 kV and above side) necessary HV bushings and terminals for making cable terminations.
4.6.5	Cable boxes shall be provided with suitable gaskets to ensure the specified protection class requirement (IP55). Cable boxes / disconnecting chambers shall be provided with necessary arrangements to prevent entry of rain water into the same. The support from base for the cable box (for 3.3 kV and above side) shall be of galvanized iron. The minimum length provided for terminating BHEL 33 kV XLPE cable shall be 1000 mm from cable gland plate to the cable lug) for the cable boxes, for LT side suitable length shall be provided (shall be discussed during detail engineering). Cable boxes shall be designed such that it shall be possible to move away the transformer without disturbing the cable terminations, leaving the cable box on external supports (as applicable). Cable boxes shall have removable top cover and ample clearance shall be provided to enable either transformer or each cable to be subjected separately to high voltage test.

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 11 OF 20

4.6.6	Disconnecting chambers: (1) Disconnecting chambers shall be provided to enable the transformer to be removed without unsealing the cables or draining oil from the main tank. (2) Disconnecting chamber shall be air insulated and complete with seal-off bushings, removable flexible connectors / links and removable covers. (3) Phase-to-phase and Phase-to-ground clearances within the chamber shall be such as to enable either the transformer or cable to be subject separately to HV tests.
4.6.7	Cable Entry on LV SIDE • Three wire system • Bottom Entry of cables • Cable size : 6runs per phase 1CX400QMM Aluminium conductor armoured XLPE Insulation. • Cable shall be in BHEL Scope • Cable Gland, Lugs and SS hardware for connecting cable on LT bus bar shall be in BHEL scope. Vendor shall provide hole on the bottom side gland plate of HV Cable box for cable entry
4.6.8	Cable Entry on HV Side • Bottom Entry of cable • 1 run per phase of 1Cx240 sqmm 33KV grade Aluminium Conductor armoured XLPE insulation • Cable termination kits are in BHEL scope • Cable Gland Lugs and SS hardware for connecting cable on HT bus bar shall be in BHEL scope. Vendor shall provide hole on the bottom side gland plate of HV Cable box for cable entry

4.7 Neutral bushings

4.7.1	The neutrals of the star-connected LV windings shall be brought out to separate bushing terminals. The neutral bushing shall be covered with an insulating cap and an M.S / FRP Sheet and there shall be a warning plate/ label provided for the neutral bushing: “For testing purpose only. Do not earth” .
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4.8 Marshalling box

4.8.1	Marshalling box shall be tank mounted, outdoor and weather/vermin/dust proof (protection class IP55), sheet-steel (2mm thick minimum) enclosure, with hinged door having padlocking facility and painted. Marshalling box shall have proper lighting and thermostatically controlled space heaters. All doors, covers and plates shall be fitted with neoprene gaskets. Bottom shall be at least 450 mm above floor level and provided with gland plate and cable glands as required. Top surface shall be sloped to drain off water falling on the box.
4.8.2	It shall be in the vendor scope to provide the interconnection cabling between the marshalling box and all the accessory devices of transformer by either PVC insulated unarmoured cables routed through GI conduit (or) PVC insulated, armoured cables.

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 12 OF 20

4.8.3	Necessary cable glands shall be provided at the marshalling box for the above mentioned cables as well as for terminating the incoming cables from remote panels.
4.8.4	One dummy terminal block in between each trip wire terminal shall be provided. The terminal blocks shall be ELMEX 10 mm ² or approved equal. At least 20% spare terminals shall be provided on each panel. The gasket used shall be of neoprene rubber. Wiring scheme (TB details) shall be engraved in a stainless-steel plate with viewable font size and the same shall be fixed inside the Marshalling Box door.

4.9 Transformer oil

4.9.1	Transformer Oil shall conform to the requirements of IEC : 60296 Transformers shall be supplied complete with transformer oil. No inhibitors shall be used in the oil.
4.9.2	In case transformer is supplied partially filled with oil, oil required for topping up shall be supplied in non-returnable sealed containers along with main consignment to avoid any shortage of oil at the time of topping up of oil at site.

S.No.	Property	Permissible values
1	Kinematic Viscosity, mm ² /s	≤ 12 at 40 ° C ≤ 1800.0 at (-)30 ° C
2	Flash Point, ° C	≥ 140° C
3	Pour point, ° C	≤ (-)40 ° C
4	Appearance	Clear , free from sediment and suspended matter
5	Density kg/dm ³ at 20 ° C	≤ 0.895
6	Interfacial Tension N/m at 25° C	≥ 0.04
7	Neutralisation value, mgKOH/g	≤ 0.01
8	Corrosive sulphur	Non Corrosive
9	Water content mg/kg	≤ 30 in bulk supply ≤ 40 in drum supply
10	Anti-oxidants additives	Not detectable
11	Oxidation Stability -Neutralization value, mgKOH/g -Sludge, % by mass	≤ 1.2 ≤ 0.8
12	Breakdown voltage As delivered, kV After treatment, kV	≥ 30 ≥ 70
13	Dissipation factor, at 90° C And 40 Hz to 60 Hz	≤ 0.005
14	PCA content	≤1%
15	Impulse withstand Level, kVp	≥ 145
16	Gassing tendency at 50 Hz after 120 min, mm ³ /min	≤ 5

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 13 OF 20

Subsequently oil samples shall be drawn and the following parameters tested during testing at works and repeated at site:

Sr. No.	Parameters	Before filling in main tank tested for	Prior to energization for Following properties acceptance norms:
i)	BDV	60 kV (min)	60 kV (min)
ii)	Moisture content	10 ppm (max.)	10 ppm (max.)

4.10 Valves

4.10.1	All valves upto and including 50 mm shall be of gun metal or of cast steel. Larger valves may be of gun metal or may have cast iron bodies with gun metal fittings. Sampling & drain valves should have zero leakage rate.
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4.11 Gaskets

4.11.1	Gasket shall be fitted with weather proof, hot oil resistant, rubberized cork gasket.
4.11.2	If gasket is compressible, metallic stops shall be provided to prevent over compression
4.11.3	The gaskets shall not deteriorate during the life of transformer if not opened for maintenance at site. All joints flanged or welded associated with oil shall be such that no oil leakage or sweating occurs during the life of transformer. The quality of these joints is considered established, only if the joints do not exhibit any oil leakage or sweating for a continuous period of at least 3 months during the guarantee period. In case any sweating / leakage is observed, vendor shall rectify the same & establish for a further period of 3 months of the same. If it is not established during the guaranteed period, the guaranteed period shall be extended until the performance is established.

4.10 Fittings on transformer for Nitrogen Injection Fire Protection System (NIFPS)

4.10.1	Vendor shall provide valves on tank, provision for TCIV valves between tank and conservator, mounting arrangements on tank for fire detectors and NIFPS control box. Detailed scope for the same are indicated under Fittings and Accessories Clause. NIFPS system shall be in BHEL Scope.
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5.0 Fittings and accessories

Following fittings per transformer shall be provided. In case of non-compliance or deviation, vendor shall indicate and provide comments.

#	Nomenclature of fitting / accessory	Qty
1	Oil conservator with equalizer pipe	1 set
2	HV cable box	1 set
3	HV disconnecting chamber	1 set
4	LV cable box	2 sets

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV - xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 14 OF 20

5	LV disconnecting chamber	2 sets
6	LV Neutral Cable Box	2 sets
7	Off circuit tap changing switch (OCTC) with operating knob, tap position marking and locking facility, with warning plate "Tap switch to be operated only with the transformer de-energized".	1 set
8	Earthing terminals with hardware suitable for connecting 50x6 GI earth strips. Separate terminals shall be provided for cable boxes, tank etc.	1 set
9	Radiators (detachable type) with drain valve at the bottom, relief valve at the top, air plug, shut-off valves at every point of connection to the tank and lifting lugs.	4 sets
10	Double float Buchholz relay conforming to IS: 3637 with alarm and trip contact. The relay shall be provided with a test cock suitable for a flexible pipe connection for checking its operation. Buchholz relay shall be provided with 2 nos. shut-off valve (on conservator side and tank side) of size 50 mm for transformer rating up to 10MVA and 80 mm for rating 10MVA and above.	1 set
11	Provision for collecting gas and oil from Buchholz relay	1 set
12	Silica gel dehydrating breather with oil cup; indicating type cobalt free silica gel breather in transparent enclosure. (maximum height 1400 mm above ground level)	1 set
13	Magnetic oil level gauge (MOG), dial type, with alarm contact, minimum and maximum filling level markings. Contact shall be suitable for 110V/220V DC. The oil level at 30 deg C shall be marked on the gauge.	1 set
14	Prismatic / toughened glass oil level gauge for transformer and tap changer chamber with min and max markings.	1 set
15	Spring operated Pressure relief valve with alarm/trip contacts. Location of this valve shall be such that the hot oil discharge shall not fall on the transformer or any of its parts. This shall include all necessary arrangements to facilitate proper discharge of PRV through discharge pipes away from the transformer.	2 sets
16	Explosion vent (double diaphragm) with sight glasses and equalizing pipe connection to conservator	1 set
17	Thermometer pocket for OTI	1 No
18	Temperature sensor for OTI	1 No
19	Thermometer pocket for WTI	1 No
20	CT for WTI	1 No
21	Oil temperature indicator, 150 mm dial type, with alarm and trip contacts, maximum reading pointer & resetting device. Oil temperature range: 0-150 deg C (resolution 1 deg C) Oil temperature accuracy: Minimum 1.5% RTD PT-100 temperature sensor for OTI (IEC 751). Analog output of 4-20mA for remote indication of OTI. Maximum height 1500mm above ground level. Accuracy class of +/-2 deg.	1 No

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 15 OF 20

22	Winding temperature indicator, 150-mm dial type, with alarm and trip contacts, maximum reading pointer & resetting device. Winding temperature range: 0-150 deg C (resolution 1 deg C) Winding temperature accuracy: Minimum 1.5% Analog output of 4-20mA for remote indication of WTI. WTI shall be provided for HV winding and both LV windings. Maximum height 1500mm above ground level. Accuracy class of +/-2 deg.	3Nos (1HV+ 2LV)
23	Marshalling box (IP55) shall be provided with removable gland plates and glands for cable entry from bottom side. Marshalling box shall be provided with OTI, WTI, transmitters (for 4-20mA output of OTI and WTI), space heater, thermostat, lamp (LED type), MCBs, power socket, switch for WTI, terminal connectors and all other attachments that are necessary to meet its functional aspects. Terminal connectors for the following signals / connections shall be made available. Number of terminal connectors for each case shall be as per connection requirements: PT-100 sensor from thermometer pocket 1) 4-20mA output for OTI 2) 4-20mA output for WTI 3) WTI CT secondary 4) Alarm contact of WTI 5) Trip contact of WTI 6) Alarm contact of OTI 7) Trip contact of OTI 8) Buchholz relay alarm 9) Buchholz relay trip 10) Magnetic oil level gauge alarm 11) Pressure relief valve alarm 12) 90-260V DC power supply (external source) 13) 240V AC supply (external source) 14) Spare connectors: Eight terminals Note: Alarm and trip contacts shall be rated for 110 / 220V DC which will be confirmed during detailed engineering.	1 set
23	Inspection window with cover	1 set
24	Cover lifting lugs / eyes	2 Nos
25	Core and winding lifting lugs / eyes	2 Nos
26	Tank lifting lugs / eyes for the entire transformer	4 Nos
27	Jacking pad with hauling eyes, to enable transformer with oil to be raised or lowered using hydraulic or screw jacks.	4 sets
28	LV & LVN cable box supports with mounting plates	2 sets each
29	HV cable box supports with mounting plates	2 sets
30	Bi-directional flat rollers	4 sets
31	Base channel with towing holes / lugs	2 sets

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 16 OF 20

32	Air release hole with plug	1 No
33	Oil filling hole with cap	1 No
34	Top filter cum sampling valve with threaded male adapter (blanking plug)	1 No
35	Bottom filter valve with threaded male adapter (blanking plug)	1 No
36	Drain valve at the bottom most point of the tank. for conservator, with blanking plug	1 No
37	Shut-off valves for conservator	2 Nos
38	Bottom Sampling valve, with blanking plug	1 No
39	Shut-off valves for radiators, with open and close markings	8 Nos
40	Drain / Sludge valve at bottom most point of tank to be provided for easy flush out / removal of sludge during maintenance	1 No
41	Valve schedule plate made of stainless steel or aluminium (anodized)	1 No
42	Rating and diagram plates made of stainless steel or anodized aluminium (Hindi and English)	2 Nos
43	Terminal marking plates	1 Set
44	Core to frame earthing hood (2kV isolation)	1 No
45	Earthing pads	2 Nos
46	Rain hoods on Buchholz, MOG and PRD with entry points of wires suitably sealed	1 set
47	Bolts & nuts – G.I / S.S – For all current carrying parts, S.S hardware shall be provided and all other places, G.I hardware shall be provided.	1 set
48	Protected type Mercury or alcohol in glass thermometer	1 No
49	Gas sampling pet cock for Buchholz Relay	1 No
50	Shielding Bushing along with copper flat and insulators	2 set
51	Valves on transformer tank for NIFPS connection	1 set
52	Provision for connecting Isolation valve (TCIV) of NIFPS System between transformer tank and conservator	1 set
53	Mounting arrangement on transformer tank for NIFPS control box mounting	1 set
54	Mounting arrangement on transformer tank for mounting of fire detectors for NIFPS	1 set

6.0 Inspection and testing of transformers at vendor works

6.1	Vendor shall provide inspection call to BHEL for all routine, type and special tests are per relevant clauses. Prior to the call, vendor shall submit the detailed manufacturing quality plan (MQP) format for approval. Inspection shall be carried out jointly by BHEL and customer.
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	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 17 OF 20

7.0 Routine, Type & Special tests (as per IEC 60076 latest amendment)

7.1	<u>Routine Tests (On all transformers):</u> 1) All routine tests as per IEC 60076. shall be conducted on 100% transformers in the scope of supply of this tender. 2) The list of tests shall include but not be limited to the following tests as per IEC 60076: 3) Measurement of Voltage Ratio & phase displacement (as per IEC 60076-1) 4) Measurement of winding resistance on all the taps (as per IEC 60076-1) 5) Vector group and Polarity Check (as per IEC 60076-1) 6) Magnetic Balance and Magnetising Current Test 7) Measurement of no load current with 415 V, 50 Hz AC supply 8) Measurement of no load losses and current at 90%, 100% & 110% of rated voltage (as per IEC 60076-1) 9) Load Loss & Short Circuit Impedance Measurement on principal & Extreme Taps 10) IR measurement (As per IEC 60076-1) 11) Measurement of capacitance & tan delta to determine capacitance between wdg & earth. 12) Separate Source Voltage Withstand Test /Applied voltage test (as per IEC 60076-3) 13) Induced overvoltage test/Induced voltage withstand(IVW) test as per IEC60076 part 3 14) Repeat no load current/loss & IR after completion of all electrical test 15) Oil leakage test on completely assembled transformer along with radiators (as per relevant clause of this sub section) 16) Jacking test followed by D.P. test 17) Marshalling Box/Cable box: It shall not be possible to insert a thin sheet of paper under gaskets and through enclosure joints. 18) IR measurement on wiring of Marshalling Box. 19) Oil Leakage Test on completely assembled transformer - All tank & oil filled compartment shall be tested for oil tightness by being completely filled with oil of viscosity not greater than that of specified oil at the ambient temperature & applying pressure equal to the normal pressure plus 35 KN/sq.m measured at the base of the tank. The pressure shall be maintained for a period of not less than 24 hours during which time no sweating shall occur.
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	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 18 OF 20

7.2

Type Tests and Special Tests (On 1 No. Transformer)

- 1) Type Test of the transformer shall be carried out in accordance with IEC 60076 Part-5
- 2) In case the transformer manufacturer has conducted all type tests required as per IEC 60076 Part-5 within last ten years as on the date of bid opening, the type test reports have to be submitted to BHEL/BHEL Customer for waiver of conductance of such type test(s). These reports shall be for the tests conducted on the equipment similar to those proposed to be supplied under this contract and test(s) shall have been either conducted at an independent laboratory or shall have been witnessed by a client.
- 3) In case the Contractor is not able to submit report of the type test(s) conducted within last ten years from the date of bid opening, or in case the type test report(s) are not found to be meeting the specification requirements, the vendor shall conduct all such tests under this contract free of cost to the Employer and submit the reports for approval.

(a) List of Type / Special Tests:

- 1) Lightning impulse (Full and chopped wave) test on windings (as per IEC 60076-3) (Not applicable for LV)
- 2) Short circuit test (special test) as per IEC 60076-5 (details below at (b)).
- 3) Temperature Rise test at a tap corresponding to maximum losses as per IEC 60076. Gas Chromatography shall be conducted on oil sample taken before & immediately after temp. rise test. Gas analysis shall be as per IS: 9434 (based on IEC: 60567), results will be interpreted as per IS:10593 (based on IEC: 60599).
- 4) Measurement of harmonics of no load current (special test)
- 5) Measurement of acoustic noise level as per NEMA TR-1 (special test)
- 6) Tank Vacuum & Pressure Test (as per CBIP norms)

(b) Short Circuit Test:-

In case short circuit test has not been conducted or the test report not meeting the specification requirement for the offered transformer manufacturer, vendor shall establish "Ability to withstand the dynamic effects of short circuit" for the offered transformer as per latest IEC 60076-5. The ability to withstand the dynamic effects of short circuit can be established either by performing actual Dynamic Withstand Short Circuit Test or by method of calculation with reference to short circuit tested reference transformer as per IEC-60076-5/Annexure A&B. vendor shall choose any one the two options mentioned below;

Option-1: Performing actual short circuit test as Type Test. In order to meet project schedule, vendor shall take suitable steps quite in advance to ensure successful conduction of short circuit test within three months' time from date of LOA failing which the offered make of the transformer shall not be considered.

Option-2: By theoretical evaluation of the ability to withstand dynamic effect of short circuit based on 'Calculation and Design and Manufacture Consideration'. In this regard the guidelines given in Annexure-A with applicable tables of the IEC 60076-5 is to be followed. The reference transformer chosen shall be of same application, winding configuration, conductor current density and as per Annexure-B of latest IEC-60076-5. Necessary Design document and reference test reports related to theoretical comparative evaluation must be submitted by vendor as required by Employer in this case.

	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 19 OF 20

	All the type and special tests shall be conducted after performing Short Circuit Test. If Tank Vacuum & Pressure Test is to be carried out, then it shall be conducted before SC test. Inverter Transformer LV winding Di-electric tests (except for lightning impulse test for LV winding) shall be carried out corresponding to levels (as per IEC 60076) for 3.6 kV class. Note: - The reference transformer chosen for type/special test shall be of the same application. - Winding configuration, conductor current density as per Annexure of the latest IEC 60076-5
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8.0 Tests at Site:

8.1	After erection at site all transformer(s) shall be subjected to the following tests: - Insulation resistance test. - Measurement of Voltage Ratio - Polarity test. - Magnetic Balance test - Dielectric test on oil. - Physical check. - Breakdown voltage on transformer oil. Oil filtration (if Oil BDV is not satisfactory) These tests shall be conducted under the supervision of transformer manufacturer.
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9.0 Documents to be submitted along with offer

9.1	Following documents shall be submitted to BHEL along with technical offer: - Filled in values/details wherever the same is asked for in BHEL technical specifications - Confirmation of NIL deviation to BHEL Purchase Spec. In case any deviation is taken, vendor shall indicate the clause no., BHEL requirement as per the subject clause and the deviation taken. - Filled up sub-vendor questionnaire format (Attachment-A) with supporting documents for vendor approval with NTPC - Compliance to NTPC's QAP of transformer (Attached with specification)
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10.0 Documents to be submitted after receipt of purchase order

10.1	Following documents shall be submitted for BHEL approval within seven days from date of purchase order. - Drawings - Overall General Arrangement (plan, elevation, end view) with overall dimensions and BOM. - Rating plate details - Valve schedule plate details with elevation & side view showing valve positions - HV cable box with disconnecting chamber, bushings, gland plate, cable termination details etc. - LV cable box with disconnecting chamber, bushings, gland plate, cable termination details etc. - Marshalling box GA (front view, side view, bill of items) and wiring diagram - Foundation plan - Bill of material of transformer
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	PURCHASE SPECIFICATION FOR SUPPLY AND COMMISSIONING SUPPORT OF ONAN TYPE, 3-PHASE, 3-WINDING, 5.3 MVA, 33KV / xxxV – xxxV INVERTER DUTY TRANSFORMER	PS-439-1336
		REV NO: 00
		PAGE : 20 OF 20

	(i) Untanking details (removal of core and assembly from tank) (j) Type Test Reports
	(3) Guaranteed technical specification of transformer in line with Appendix-B (schedule of technical particulars to be furnished by manufacturer) of IS: 2026 Part-1. Over and above the same, any details asked for as per Annexure-1 shall be included.
	(4) Manufacturing Quality Plan (routine tests, type tests, test certificates) covering Incoming materials, in-process checks during manufacturing, final inspection, finished goods, packing and forwarding.
	(4) Manufacturing clearance shall be subject to approval of the above documents by BHEL/customer.

11.0 Documents to be submitted along with consignment

11.1	Following documents shall be submitted to BHEL at the time of delivery of the consignment: (1) As built drawings of transformer (2) Routine test reports on transformer (3) Type test reports of transformer (4) Test certificate for transformer oil (5) Operations and maintenance manual of transformer in hard + soft copy
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12.0 Support from vendor during document approval phase

12.1	During the phase of approval of design / engineering / quality documents (GA, GTP, BOM, MQP, Test report etc), it will be required to hold in-depth discussions with BHEL/customer to provide clarifications through clear understanding of technical queries. Accordingly, when needed, vendor shall hold direct (across-the-table) discussions with BHEL (Bangalore office) and customer to eliminate undue time delays.
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14) TRANSFORMER Converter Duty Type

[illegible]



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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 03

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 03), General Conditions of Contract (document reference: CE: PR: 002 - Rev 02) 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. Offers to be submitted in English language only.
12. For this procurement, the local content to categorize a supplier as a Class-I local supplier/ Class-II local supplier/ Non-local supplier and purchase preference to Class-I local supplier, is as defined in Public procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent Orders issued by the Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of price bid/s against this NIT.

Any Indian Bidder intending to avail the benefits shall submit the requisite documents as per the aforesaid orders.

13. The Bidder shall mandatorily submit Declaration as mentioned below, under Rule 144(xi) of General Financial Rules, 2017 amendment dt 23.07.2020 issued by Ministry of Finance, Govt. of India. The declaration to be submitted on Company Letter head duly signed and sealed by authorised signatory, for ascertaining the eligibility of offer in the tender.

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered."

(Where applicable, evidence of valid registration by the Competent Authority shall be attached).

The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

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

B. GUIDELINES FOR PREPARATION OF OFFER:

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

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

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

2. Supplier shall ensure to superscribe each envelope with RFQ number, RFQ Date, RFQ Due date and time, Item Description and Project clearly & boldly. Also mention on the envelope whether it is “Techno Commercial Bid” or “Price Bid” or “Pre-Qualification Bid”. Please ensure complete address, department name and purchase executive name is mentioned on the envelope (before dropping in the tender box or handing over) so that the tender is available in time for bid opening.
3. BHEL standard Commercial Terms and Conditions (duly filled, signed & stamped) must accompany Technical-Commercial offer without fail and should be submitted in original only.

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

4. Validity: Unless otherwise specified in SCC (special commercial conditions of contract), the offer will be valid for a period of 90 days from the date of part-I bid opening and in case of Negotiation/Counter-offer/Reverse Auction, price validity will apply afresh for a period of _60_ days from the date of according final price by bidder (or) 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), 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. Wherever applicable, bidders should indicate "lumpsum" Erection and Commissioning (or) Erection Supervision and Commissioning charges, as applicable (including To & Fro Fare, Boarding, Lodging, Local Conveyance etc.) for carrying out E&C activity and further handing over to customer. The quotation shall clearly indicate scope of work, likely duration of commissioning, pre-commissioning checklist (if any).
11. Wherever bidders require PAC (Project Authority Certificate)/applicable certificates for import of raw materials, components required for DECC,EPCG Power Projects, Export Projects or other similar projects wherein supplies are eligible for customs duty benefits, lists and quantities of such items and their values (CIF) has to be mentioned in the offer. Prices must be quoted taking into account of such benefits.
12. Prices should be indicated in both figures & words. Bid should be free from correction/overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection. Any typographical error, totalling mistakes, currency mistake, multiplication mistake, summing mistakes etc. observed in the price bids will be evaluated as per **Annexure III** "Guidelines for dealing with Discrepancy in Words & Figures – quoted in price bid" and BHEL decision will be final.
13. Documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder. However, this requirement is not mandatory for offers uploaded through E-Procurement System (EPS).

C. GUIDELINES FOR OFFER SUBMISSION:

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

1. Offers / Quotations must be dropped in tender box before 13.00 Hrs. on or before due date mentioned in RFQ. The offers are to be dropped in the proper slot of the Tender Box kept in our reception area with caption "CE, SC&PV, DEFENCE". Tenders are opened on 3 days in a week (Monday/Wednesday/Friday). Tender must be deposited in the slot corresponding to the day (Monday - Box no.4/Wednesday - Box no. 6 /Friday - Box no.8) while depositing the offer.
2. E-Mail/ Internet/EDI offers received in time shall be considered only when such offers are complete in all respects. In case of offers received through E-mail, please send the offer to the email ID specified in the SCC document of the tender.
3. Offers of Vendors who already have a valid Technical/Commercial MOU with BHEL-EDN for the items of the RFQ shall mention the relevant MOU reference no. and give only such other details not covered in the MOU.
4. In cases where tender documents are bulky, or due to some reasons tender documents are required to be submitted by hand or through posts/couriers, the offers are to be handed over either of the two purchase officers whose names are mentioned in the SCC document of tender RFQ.
5. Tenders will be opened on due date, time and venue as indicated in the RFQ in the presence of bidders at the venue indicated in the RFQ. For EPS tenders, e-mail notifications will be automatically generated and forwarded to registered e-mail ID/s of bidders during opening of tenders.
6. Bidder will be solely responsible:
 - a. For submission of offers before due date and time. Offers submitted after due date and time will be treated as "Late offers" and will be rejected.
 - b. For submission of offers in the correct compartment of the tender box based on the day of due date (Monday/Wednesday/Friday). Please check before dropping your offer in the correct tender box.

- c. For depositing offers in proper sealed condition in the tender box. If the bidder drops the tender in the wrong tender box (or) if the tender document is handed over to the wrong person, BHEL will not be responsible for any such delays.
- d. For offers received through email etc., suppliers are fully responsible for lack of secrecy on information and ensuring timely receipt of such offers in the tender box before due date & time (This clause will not be applicable for EPS tenders).

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

- e. In case of e-tender, all required documents should be uploaded before due date and time. Availability of power, internet connections, system/software requirements etc. will be the sole responsibility of the bidder. Wherever assistance is needed for submission of e-tenders, help-line numbers as available in the 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. Un-opened bids (including price bids) will be returned to the respective bidders after release of Purchase order. Regarding Offers for EPS tenders that get rejected on PQC/ techno-commercial grounds, the bids for the subsequent parts will not be opened i.e., both technical bid and price bid (Parts-II & III) will not be opened in case of rejection on PQC ground and price bid (Part-II/Part-III, as applicable) will not be opened in case of rejection on techno-commercial ground.
6. After receipt of Purchase Order, supplier should submit required documents viz., specified drawings, bill of materials, datasheets, catalogues, quality plan, test procedure, type test report , O & M Manuals and/or any other relevant documents as per Specification/Purchase Order, as and when required by BHEL/Customer.

7. Any deviation to the terms and conditions not mentioned in the quotation by supplier in response to this enquiry will not be considered, if put forth subsequently or after issue of Purchase Order, unless clarification is sought for by BHEL and agreed upon in the Purchase Order.
8. Evaluation shall be on the basis of delivered cost (i.e. "Total Cost to BHEL").
 "Total Cost to BHEL" shall include total basic cost, packing & forwarding charges, taxes and/or duties(as applicable), freight charges, taxes on Services, customs clearance charges for imported items, any other cost indicated by bidder for execution of the contract and loading factors (for non-compliance to BHEL Standard Commercial Terms & Conditions). Benefits arising out of Nil Import Duty on DEEC, EPCG, DFIA Projects, Physical Exports or such 100% exemptions (statutory benefits), project imports, customer reimbursements of statutory duties (like Basic Customs Duty and cess on customs duty), Input tax credits as applicable will also be taken into account for arriving at the Total cost to BHEL (wherever applicable and as indicated in SCC document of tender).

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

In the course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders.

In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s).

Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

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

Single part bids:	Date of tender opening
Two/three part bids:	Date of Part-I bid opening
Reverse Auction:	Date of Part-I bid opening

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

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

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

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. STANDARD PAYMENT TERMS OF BHEL-EDN:

<u>PURCHASE ORDERS FOR:</u>	<u>SUPPLY WITH SERVICE(S)</u>	<u>SUPPLY ONLY</u>
<u>INDIGENOUS PROCUREMENT</u>	a. 100% of basic value with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later. <u>Note:</u> In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	b. 100% of PO value with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later.
<u>IMPORT PROCUREMENT</u>	c. 100% of basic value will be paid against usance draft of 45 days from the date of AWB/BOL on submission of complete set of documents. <u>Note:</u> In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	d. 100% of PO value will be paid against usance draft of 45 days from the date of AWB/BOL on submission of complete set of documents.
<u>HIGH-SEA SALES PROCUREMENT</u>	e. 100% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later <u>Note:</u> In case PBG is not furnished, only 90% payment will be released against 100% claim without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.	f. 100% of basic value will be paid in 45 days from the date of signing of High Sea Sale agreement or 15 days from the date of submission of complete set of documentation, whichever is later.

g. Erection and Commissioning:

Evaluation methodology: Unless and otherwise specified in SCC, E&C charges should not be less than 10% of the main supply value. In case the quoted total E&C value is less than 10% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price proportionally from all items and apportioning towards E&C charges.

Payment term: 100% E&C charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C.

h. Erection Supervision and Commissioning:

Evaluation methodology: Unless and otherwise specified in SCC, E&C charges should not be less than 5% of the main supply value. In case the quoted total E&C value is less than 5% of the main supply value, BHEL shall evaluate Bidders Price deducting differential amount from main supply price proportionally from all items and apportioning towards E&C charges.

Payment term: 100% E&C charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C.

i. Comprehensive Annual Maintenance Contract:

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

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

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

LOADING FACTORS FOR DEVIATION IN PAYMENT TERMS (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.
- k. 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.
- l. Standard payment terms indicated in Clauses: F (a), (b), (c), (d), (e), (f), (g), (h), (i) & (j) will not attract any loading.

Note 1: Basic value of Purchase Order mentioned above will include all components of the purchase order and will exclude only taxes, duties, freight, training charges, E&C and AMC charges (wherever applicable). Wherever the Purchase Order is split into import portion and indigenous portion of supply, minimum % to be quoted for Services, wherever mentioned, will be of both purchase order values put together.

Note 2: In case of multiple packages/units in a power plant, payment of E&C charges will be processed on pro-rata basis.

Note 3: No deviation will be permitted from the duration of Guarantee/Warranty and/or Comprehensive Annual Maintenance Contract period specified in SCC.

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. Performance bank guarantee (PBG):

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 PBGs will be returned only after expiry of the claim period.
10. PBG shall not be applicable for spares.

I. PROVISIONS 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 the Udyog Aadhaar/Udyam Registration certificate along with attested copy of a CA certificate (Annexure VIII) applicable for the relevant financial year (latest audited) along with the tender documents in the Part-I bid to avail the applicable benefits.

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.

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.
A panel of independent External Monitors (IEMs) have been appointed to oversee implementation of IP in BHEL.
The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory who signs in the offer) along with techno-commercial bid. 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 the IEM mentioned in the tender.

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."



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

SCPV: BOS: GCC - Rev 03

GENERAL COMMERCIAL CONDITIONS FOR CONTRACT (GCC)

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

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

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

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

- 'The Purchaser' means Bharat Heavy Electricals Limited, Electronics division, Mysore road, Bangalore 560 026, a Unit of Bharat Heavy Electricals Limited (A Govt. of India Undertaking) incorporated under the Companies Act having its registered office at BHEL House, Siri Fort, New Delhi-110049, India and shall be deemed to include its successors and assigns. It may also be referred to as BHEL.
- 'The vendor' means the person, firm, company or organization on whom the Purchase Order is placed and shall be deemed to include the vendor's successors, representative heirs, executors and administrator as the case may be. It may also be referred to as Seller, Contractor or Supplier.
- 'Contract' shall mean and include the Purchase Order incorporating various agreements, viz. tender/ RFQ, offer, letter of intent / acceptance / award, the General Conditions of Contract and Special Conditions of Contract for Purchase, Specifications, Inspection / Quality Plan, Schedule of Prices and Quantities, Drawings, if any enclosed or to be provided by BHEL or his authorized nominee and the samples or patterns if any to be provided under the provisions of the contract.
- 'Parties to the Contract' shall mean the 'The Vendor' and the Purchaser as named in the main body of the Purchase Order.
- "Bidder" shall mean duly established reputed organisation, manufacturer etc. having requisite financial and technical capability and experience of participating in the bid invited by the purchaser for the tender.
- Bid- The term "bid" or "bidding" can also relate to the documented Offer submitted in response to a request for quotation (RFQ) /Tender.

Interpretation:

In the contract, except where the context requires otherwise:

- words indicating one gender include all genders;
- words indicating the singular also include the plural and words indicating the plural also include the singular;
- provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
- "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 unless otherwise such variations / escalations are provided for and agreed by BHEL in writing in the purchase order.
2. **Validity:** The offer will be valid for a period of 90 days from the date of technical bid opening date. Validity beyond 90 days, if required, will be specified in the SCC (special conditions of contract).
3. **Taxes & Duties:** Taxes as mentioned in the Contract Price or Price Schedule shall be paid to the Contractor subject to the Contractor complying with all the statutory requirements and furnishing the relevant documents including error free invoices containing detailed break-up of the taxes. Any duties, levies or taxes not mentioned in Contract Price or Price Schedule but applicable as per any statute(s) shall be deemed to be included in the Contract price and shall be to the account of the Contractor.
The Contractor shall bear and pay all the costs, liabilities, levies, interest, penalties in respect of non-compliances of any legal requirements as per various statutory provisions. The contractor shall keep the owner indemnified at all times from any tax liability, interest, penalties or assessments that may be imposed by the statutory authorities for non-compliances or non-observation of any statutory requirements by the Contractor.
4. **Ordering and confirmation of Order:** Vendor shall send the order acceptance on their company letter head within two weeks from the date 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 two weeks (or the time limit as specified / agreed by BHEL) from the date of the purchase order.
5. **Documentation:** After receipt of Purchase Order, vendor should submit required documents like 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.
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.
6. **TERMS OF DELIVERY:**
FOR IMPORTED PURCHASE:
Price offered shall be for goods packed and delivered CIF Seaport/ International Airport (FCA) including packing, forwarding, Handling, Ancillary charges like processing of Sight Draft, negotiation charges of bank, Export declaration, Certificate of origin etc.
Packing shall be Air/Sea worthy, best suitable for trans-shipment and to take care of transit damages. If containerized, no. of containers & size of container shall be mentioned. Packing weight (gross & net) Packing dimensions shall be given prior to shipment to ascertain whether the consignment can be carried on standard cargo in contract or as ODC.
Wooden packing material for all the foreign consignments should be treated as per ISPM-15 & Fumigation / Phytosanitary certificate to be submitted to the freight forwarders/ BHEL along with the invoice, B/L, packing list etc.
Vendors shall indicate the name of International Airport/Seaport. The consignment shall be handed over to BHEL approved freight forwarder as mentioned in PO.

FOR INDIGENOUS PURCHASE:

Equipment shall be delivered on “FOR SITE” basis, inclusive of freight, packing, insurance & forwarding charges.

Packing shall be Road / Rail / Air / Sea worthy, best suitable for transshipment and to take care of transit damages. Smaller consignments can be dispatched through Courier services/ RPP with the prior approval of the purchasing Executive.

Deviation for the delivery term is liable for rejection.

7. Penalty:

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 document approval by customer / BHEL or date of issue of manufacturing clearance, whichever is later. 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 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.

8. **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 applied to 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.
9. **Reverse Auction:** BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non- consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit ‘Process compliance form’ (to the designated service provider) as well as ‘Online sealed bid’ in the Reverse Auction. Non-submission of ‘Process compliance form’ or ‘Online sealed bid’ by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

10. **Pre Shipment Inspection:** Prior written notice of at least one week 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.
11. **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 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.
12. **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 Phytosanitary / Fumigation certificate. If safety information sheets (MSDS – Material Safety Data Sheet) exist for an item or the packaging, vendor must provide this information without fail along with the consignment. Each package must be marked with Consignee name, Purchase order number, Package number, Gross weight and net weight, dimensions (L x B x H) 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. Separate packing & identification of items should be as follows.
 1. Main Scope - All items must be tagged with part no. & item description.
 2. Commissioning spares - All items must be tagged with part no. & item description.
 3. Mandatory spares - All items must be tagged with part no. & item description.
13. **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.
14. **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.

15. **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 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.
16. **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.
17. **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.
18. **Shortages:** In the event of shortage on receipt of goods and/or on opening of packages at site, all such shortages shall be made good within a reasonable time that BHEL may allow from such intimation and free of cost.
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.
19. **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.
20. **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.
21. **Product Information, Drawings and Documents:** 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.

22. **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.

23. **Force Majeure:** 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.

24. **Guarantee / Warranty:** Wherever required, and so provided in the specifications / Purchaser Order, the Seller shall guarantee that the stores supplied shall comply with the specifications laid down, for materials, workmanship and performance. The guarantee / warranty period as described shall apply afresh to replaced, repaired or re-executed parts of a delivery. If the vendor fails to take proper corrective action to repair/replace defects satisfactorily within a reasonable period, Purchaser shall be free to take corrective action as may be deemed necessary at vendor's risk and cost after giving notice to the vendor, including arranging supply of goods from elsewhere at the sole risk and cost of the vendor. Unless otherwise specifically provided in the Purchase Order, Vendor's liability shall be co terminus with the expiration of the applicable guarantee / warranty period.

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

26. **Liability during guarantee / warranty:** Vendor shall arrange replacement / repair of all the defective materials / services under its obligation under the guarantee / 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 first time commissioning or use, vendor shall be responsible for replacement / repair of the goods as required by BHEL at vendor's cost. In all such cases expiry of guarantee / warranty will not be applicable.

27. **Liability after guarantee / warranty period:** At the end of the guarantee / warranty, the Vendor's liability ceases except for latent defects (latent defects are defects / performance issues noticed after the

guarantee / warranty has expired). The Contractor's liability for latent defects warranty for the plant and equipment including spares shall be limited to a period of six months from the end of the guarantee / as specified in RFQ.

28. **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.
29. **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).
30. **Arbitration Clause:** In case amicable settlement is not reached in the event of any dispute or difference arising out of the execution of the Contract or the respective rights and liabilities of the parties or in relation to interpretation of any provision in any manner touching upon the Contract, such dispute or difference shall (except as to any matters, the decision of which is specifically provided for therein) be referred by either party to the sole arbitration of an Arbitrator appointed by the Executive Director/ General Manager of the purchasing unit/ region/ division of BHEL. Vendor shall have no objection even if the Arbitrator so appointed is an employee of BHEL or has ever dealt/ had to deal with any matter relating to this Contract.
 Subject as aforesaid the provisions of the Arbitration and Conciliation Act, 1996 of India or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings under this clause. It is a term of contract that the party initiating arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute. The venue for the arbitration shall be Bangalore, India. The award of the arbitrator shall be a speaking award and shall be final, conclusive and binding on all parties to this contract.
 The cost of arbitration shall be borne equally by the parties. Notwithstanding the existence of any dispute or difference or any reference for the arbitration, the vendor shall proceed with and continue without hindrance the performance of the work under the contract with due diligence and expedition in a professional manner.
31. **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.
32. **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.
33. Vendors shall provide their state wise list of GSTIN number as per Govt of India Statute.

34. If the vendor is below the threshold limit, viz Rs.20. lacs as per existing provisions, then a declaration to be provided to that effect along with copy of accounts, failing which the supplier will be treated as an Unregistered dealer (URD) for which tax is payable on reverse charge (RCM) by BHEL.
35. If the vendor is above the threshold limit & is yet not registered, GST is payable by BHEL on reverse charge basis.
36. All supply items are linked to HSN code (Harmonised System Nomenclature). This goods list is mapped with HSN code which is released by Govt of India & available in public domain. All registered suppliers submitting the quote shall mandatorily mention HSN code relevant for the goods quoted.
37. Under GST, Govt of India has linked every service to a service accounting code called SAC. The list of services and the corresponding service accounting code (SAC) is released by Govt of India & available in public domain. All registered suppliers submitting the quote shall mandatorily mention SAC code relevant for the service quoted.
38. The rate of tax applicable for 35 services is also released by Government and rate for any service not falling in the list of 35 services is 18%.
39. Invoice should contain all particulars as per invoice Rules and should include the GST registration number (GSTIN), service accounting code (SAC) apart from all other details mentioned.
40. Invoice should contain all particulars as per invoice Rules and should include the GST registration number (GSTIN), HSN code apart from all other details mentioned.
41. In case GST is payable on reverse charge (RCM) invoice should mention that tax is payable on reverse charge
42. For a registered supplier, the supplier uploaded sales data for the month will be available to recipient on 11th of the subsequent month & details can be verified by BHEL. Credit availment can be confirmed based on this verified data
43. If the Supplier is not registered, then tax is payable on Reverse charge & will be to the account of the supplier
44. All services in the course of business or furtherance of business are eligible to credit subject to other compliances listed herein.
45. If service is eligible for credit, then the credit can be availed only if the invoice is as per the prescribed format, the supplier has uploaded the invoice in the GSTN portal, paid the taxes & uploaded the return, and matches with our inward data, failing which any availment of credit attracts interest.
46. Even in case of services where credit is not eligible,
 - (i) either the supplier should have registered (if above threshold limit) & comply with all above statutory provisions relating to invoice, tax remittance, return filing etc. This can be verified by BHEL from the GSTN portal OR
 - (ii) if not registered BHEL shall be liable to pay applicable taxes on reverse charge
47. For any deficiency in services, where a recovery is made / adjusted in supplier bills, the supplier has to raise a credit note on BHEL & upload in GSTN portal. All above rules applicable for invoice also apply for credit note.
48. All notifications and rules as per central board of excise and customs will be applicable.

ANNEXURE - I
LIST OF INTERNATIONAL GATEWAY AIRPORTS

SCHEDULE NO	COUNTRY	CURRENCY CODE	AIRPORT
D01	UK	GBP	LONDON (HEATHROW)
D02	UK	GBP	NEW CASTLE
D03	UK	GBP	OXFORD. CHETLAM
D04	UK	GBP	BRISTOL. WELLINGBOROUGH
D05	UK	GBP	BIRMINGHAM
D06	UK	GBP	EAST MIDLANDS
D07	UK	GBP	MANCHESTER
D08	UK	GBP	LEEDS
D09	UK	GBP	GLASGOW
D10	FRANCE	EURO	PARIS (ROISSY) & LYON
D11	SWEDEN	EURO	STOCKHOLM
D12	SWEDEN	EURO	GOTHENBERG & MALMO
D13	ITALY	EURO	ROMA, MILAN
D14	ITALY	EURO	TURIN, BOLOGNA, FLORENCE
D15	NETHERLANDS	EURO	AMSTERDAM, ROTTERDAM
D16	AUSTRIA	EURO	VIENNA, LINZ, GRAZ
D17	BELGIUM	EURO	ANTWERP, BRUSSELS
D18	DENMARK	DKK	COPENHAGEN
D19	JAPAN	JPY	TOKYO, OSAKA
D20	SINGAPORE	SGD	SINGAPORE
D21	CANADA	CAD	TORONTO
D22	CANADA	CAD	MONTREAL
D23	USA	USD	NEW YORK, BOSTON
D24	USA	USD	CHICAGO
D25	USA	USD	SAN FRANCISCO, LOS ANGELES
D26	USA	USD	ALANTA, HOUSTON
D27	GERMANY	EURO	MUNICH, KOLN, DUSSELDORF, HANNOVER, HAMBURG, STUTTGART, DAMSTADT, MANIHIEM, NURUMBERG
D28	GERMANY	EURO	FRANKFURT
D29	GERMANY	EURO	BERLIN
D30	SWITZERLAND	SFR	BASLE, ZURICH, GENEVA
D31	SPAIN	EURO	BARCELONA
D32	AUSTRALIA	AUD	SYDNEY
D33	AUSTRALIA	AUD	MELBOURNE
D34	AUSTRALIA	AUD	PERTH
D35	CZECH	EURO	PRAGUE
D36	HONG KONG	HKD	HONG KONG
D37	NEW ZELAND	NZD	AUCKLAND
D38	RUSSIA	USD	MOSCOW
D39	SOUTH KOREA	USD	KIMPO INTERNATIONAL, INCHEON
D40	FINLAND	EURO	HELSINKI
D41	ROMANIA	EURO	BUCHAREST
D42	NORWAY	EURO	OSLO
D43	IRELAND	EURO	DUBLIN
D44	ISRAEL	USD	TEL AVIV
D45	UAE	USD	DUBAI
D46	OMAN	USD	MUSCAT
D47	EGYPT	USD	CAIRO
D48	TAIWAN	USD	TAIPEI
D49	UKRAINE	USD	KIEV
D50	CHINA	USD	SHANGHAI, SHENZHEN
D51	PHILIPINES	USD	MANILA
D52	MALAYSIA	USD	KUALALUMPUR, PE NANG
D53	CYPRUS	USD	LARNACA
D54	SOUTH AFRICA	USD	JOHANNESBERG, DURBAN
D55	SLOVAKIA	EURO	BARTISLOVA
D56	SAUDI ARABIA	SAR	RIYADH
D57	TURKEY	EURO	ISTANBUL
D58	THAILAND	USD	BANGKOK
D59	BRAZIL	USD	SAO PAULO, RIO DE JANEIRO

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

Note:

1. Units are advised that expiry of claim period may be kept 3-6 months after validity date. It may be ensured that the same is in line with the agreement/ contract entered with the Vendor.
2. The BG should be on Non-Judicial Stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the State(s) where the BG is submitted or is to be acted upon or the rate prevailing in the State where the BG was executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Vendor/Contractor/Supplier /Bank issuing the guarantee.
3. In line with the GCC, SCC or contractual terms, Unit may carry out minor modifications in the Standard BG Formats. If required, such modifications may be carried out after taking up appropriately with the Unit/Region's Law Deptt.

4. In Case of Bank Guarantees submitted by Foreign Vendors-

- a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
- b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**
 - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank's (BHEL's Consortium Bank) branch in India. It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
 - b.2 **In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank** (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at **sl.no. b.1** will required to be followed.
 - b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). The BG Format provided to them should clearly specify the same.

ANNEXURE - 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 swift Code(applicable for EFT only)	
8 Bank IFSC code(applicable for RTGS)	
9 Bank IFSC code(applicable for NEFT)	

- A I hereby certify that the particulars given above are true, correct and complete and that I, as a representative for the above named Company, hereby authorise BHEL, EDN, Bangalore to electronically deposit payments to the designated bank account.
- B If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL / transferring Bank responsible.
- C This authority remains in full force until BHEL, EDN, Bangalore receives written notification requesting a change or cancellation.
- D I have read the contents of the covering letter and agree to discharge the responsibility expected of me as a participant under ECS / EFT.

Date:

Authorised Signatory:

Designation:

Telephone NO. with STD Code

Company Seal

Bank Certificate

We certify that _____ has an Account No _____ with us and we confirm that the bank details given above are correct as per our records.

Date: _____ (.....)

Place: _____ Signature _____

Please return completed form along with a blank cancelled cheque or photocopy thereof to:

Bharath Heavy Electricals Ltd,

Attn:

Electronics Division, Mysore Road,

BANGALORE - 560 026

In case of any Query, please call : 080-26998xxx / 2674xxxx or fax no. 080-2674xxxx

List of Consortium Banks

Sl. No	Nationalised Banks	Sl. No	Public Sector Banks
1	State Bank of India	18	IDBI
2	Allahabad bank		
3	Andhra bank	Sl. No	Private banks
4	Bank of Baroda	19	Axis Bank
5	Canara Bank	20	HDFC
6	Corporation bank	21	ICICI
7	Central bank	22	The Federal Bank Limited
8	Indian Bank	23	Kotak Mahindra Bank
9	Indian Oversea Bank	24	Indusind Bank
10	Oriental bank of Commerce	25	Yes Bank
11	Punjab National Bank		
12	Punjab & Sindh Bank	Sl. No	Foreign banks
13	Syndicate Bank	26	CITI Bank N.A
14	UCO Bank	27	Deutsche Bank AG
15	Union Bank of India	28	HSBC
16	United Bank of India	29	Standard Chartered Bank
17	Vijaya Bank	30	J P Morgan

ANNEXURE - VI

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 - VII

BENEFITS FOR MSE SUPPLIERS AS PER MSMED ACT 2006 AND PUBLIC PROCUREMENT POLICY 2012

MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of Acknowledgement in EM II).

Or

Valid NSIC certificate or EM II certificate along with attested copy of CA certificate (Format enclosed: ANNEXURE VIII) where deemed validity of EM II certificate of five years has 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 1 in case of two part bid).

Non-submission of such documents will lead to consideration of their bid at par with other bidders.

No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazette officer.

ANNEXURE - VIII
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-II) 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 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/yy) 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

Public Procurement (Preference to Make in India)

For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 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/ WO against this NIT.

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.

Arbitration Clause in case of Contract with contractors/vendors /consultants 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 contractors/vendors /consultants when they are 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.”

Annexure-X

Restrictions under Rule 144(xi) of General Financial Rules, 2017 amendment dt: 23.07.2020

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means :-
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose *beneficial owner* is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The *beneficial owner* for the purpose of (iii) above will be as under:
 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation--

 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.