

3.15 DEGREE OF PROTECTION

The supplier shall propose following Degree of protection for those equipment/Items for which the degree of protection has not been specified in the specification for the approval of BHEL/TANTRANSCO. The decision of BHEL/TANTRANSCO shall be final. The enclosures of the Control Cabinets, Junction boxes and Marshalling boxes panels etc to be installed shall be provided with degree of protection as detailed here under:

- a) Installed outdoor: IP-55
- b) Installed indoor in air conditioned area: IP-42
- c) Installed in covered area IP:52
- d) For LT switchgear (AC & DC distribution Boards): IP-54

The degree of protection shall be in accordance with IS:13947, (Part-1)/IEC-947(Part-1). Type test report/or degree of protection test on each type of the box shall be submitted for approval.

3.16 RATING PLATES, NAME PLATES AND LABELS:-

The equipment's shall be provided with a rating plate or plates marked with but not limited to following data whatever needs to that particular equipment's.

- (a) Manufacturer's name or trade mark.
- (b) Serial number and type design making it possible to get all relevant information from the manufacturer.
- (c) Year of manufacture.
- (d) Rated voltage
- (e) Rated insulation level.
- (f) Rated frequency
- (g) Rated Normal current.
- (h) Rated short circuit breaking current
- (i) First pole to clear factor
- (j) Rated duration of short circuit
- (k) Rated auxiliary D.C. supply voltage of closing and opening devices.
- (l) Rated pressure of SF6 gas for operation and interruption.
- (m) Rated out of phase breaking current.
- (n) Rated supply voltage of auxiliary circuit.
- (o) Rated supply frequency of auxiliary circuits.
- (p) Purchase Order Number and Date.

The rating plate shall be visible in position of normal service and installation.

The rating plate shall be weather proof and corrosion proof.

Type or serial number together with details of the loading conditions under which the item of the substation in question has designed to operate and such diagram plates as may be required by the BHEL/TANTRANSCO. The rating plate for each equipment shall be according to IEC requirements.

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Alternately two separate plates one with Hindi and other with English inscriptions may be provided. During approvals drawings of Rating/name plates/labels shall also be submitted.

3.17 EARTHING:

The operating mechanism housing, control cabinets, support structure etc. shall be provided with two separate earthing terminals suitable for bolted connection to 50x8mm mild steel flat to be provided for connection to station earth mat.

Circuit breakers, LA, Isolator, CVT, CT, BPI shall be provided with two grounding pads suitable for connection to galvanized steel flat of Size 75X12 mm. Control panels, Relay panel, outdoor marshalling boxes, Junction boxes, Lighting panels and distribution board shall be provided with two grounding pads, for connection to galvanized steel flat. The two pads shall be provided, one each at the middle of the two opposite sides of the bottom frame of the equipment. Earthing of hinged door shall be done by using a separate earth wire.

3.18 TERMINAL BLOCKS AND WIRING

Control and instrument leads from the switchboards or from other equipment will be brought to terminal boxes or control cabinets in conduits. All Inter-phase and external connections to equipment or to control cubicles will be made through terminal blocks.

Terminal blocks shall be 1100 V grade and have continuous rating to carry the maximum expected current on the terminals. Those shall be of moulded piece complete with insulated barriers stud type terminals, washers, nuts and lock nuts. Screw clamp, overall insulated, insertion type, rail mounted terminals can be used in place of stud type terminals. But preferably the terminal blocks shall be non-disconnecting stud type equivalent to Elmex type CATM4, Phoenix cage clamp type of Wedge or equivalent. The Insulating material of terminal block shall be nylon 6.6 which shall be free of halogens, fluorocarbons etc.

Terminal block for current transformer and voltage transformer secondary leads shall be provided with test links and isolating facilities. The current transformer secondary leads shall also be provided with short circuiting and earthing facilities.

The terminal shall be that maximum contact area is achieved when a cable is terminated. The terminal shall have a locking characteristic to prevent cable from escaping from the terminal clamp unless it is done intentionally. The conducting part in contact with cable shall preferably be tinned or silver plated however Nickel plated copper or zinc plated steel shall also be acceptable. The terminal blocks shall be of extensible design. The terminal blocks shall have locking arrangement to prevent its escape from the mounting rails.

The terminal blocks shall be fully enclosed with removable covers of transparent, non-deteriorating type plastic material. Insulating barriers shall be provided between the terminal blocks. These barriers shall not hinder the operator from carrying out the wiring without removing the barriers.

Unless otherwise specified terminal blocks shall be suitable for connecting the following conductors on

each side.

All circuits except CT circuits :	Minimum of 2 nos. of 2.5 sq.mm.copper flexible.
All CT circuits :	Minimum of 4 nos. of 2.5 sq.mm, copper flexible.

The arrangements shall be in such a manner so that it is possible to safely connect or disconnect terminals on live circuits and replace fuse links when the cabinet is live. At least 20 % spare terminals shall be provided on each panel/cubicle/box and these spare terminals shall be uniformly distributed on all terminals rows.

There shall be a minimum clearance of 250mm between the first bottom row of terminal block and the associated cable gland plate. Also the clearance between two rows of terminal blocks shall be a minimum of 150 mm. The Supplier shall furnish all wire, conduits and terminals for the necessary inter-phase electrical connection (where applicable) as well as between phases and common terminal boxes or control cabinets.

All input and output terminals of each control cubicle shall be tested for surge withstand capability in accordance with the relevant IEC Publications, in both longitudinal and transverse modes. The supplier shall also provide all necessary filtering, surge protection, interface relays and any other measures necessary to achieve an impulse withstand level at the cable interfaces of the equipment.

TB sizes for incoming power supply shall be informed/confirmed during drawing approval stage.

3.19 CONTROL CABINETS, JUNCTION BOXES, TERMINALS BOXES AND MARSHALLING BOXES FOR OUTDOOR EQUIPMENTS

All types of boxes, cabinets etc. shall generally conform to and be tested in accordance with IS-5039, IS-8623 or IEC-439, as applicable and the clause given below.

Control cabinet, Junction boxes, Marshalling boxes & Terminal boxes shall be made of sheet steel. Sheet steel used shall be at least 2.0 mm thick cold rolled or 2.5 mm hot rolled. The box shall be properly braced to prevent wobbling. There shall be sufficient reinforcement to provide level surfaces, resistance to vibrations and rigidity during transportation and installation. Cabinet/boxes shall be free standing floor mounting type, wall mounting type or pedestal mounting type as per requirements.

Cabinet /boxes shall be provided with double hinged doors with padlocking arrangements. The distance between two hinges shall be adequate to ensure uniform sealing pressure against atmosphere. The quality of gaskets shall be such that it does not get damaged/cracked during the operation of the equipment.

All door, removable covers and plates shall be gasketed all around with suitably profiled Neoprene /EPDM gaskets. The gasket shall be tested in accordance with approved quality plan. The quality of gasket shall be such that it does not get damaged /cracked during the years of the equipment or its major overhaul whichever is earlier. All gasketed surfaces shall be smooth, straight and reinforced if necessary

to minimize distortion and to make a tight seal. Ventilating Louvers, if provided, shall have screen and filters. The screen shall be fine wire mesh made of brass.

All boxes/cabinets shall be designed for the entry of cables from bottom by means of weather proof and dust-proof connections. Boxes and cabinets shall be designed with generous clearances to avoid interference between the wiring entering from below and any terminal blocks or accessories mounted within the box or cabinet. Suitable cable gland plate projecting at least 150 mm above from the base of the Marshalling Kiosk/box shall be provided for this purpose along with the proper blanking plates. Necessary number of cable glands shall be supplied and fitted on this gland. The gland shall project at least 25mm above gland plate to prevent entry of moisture in cable crutch. Gland plate shall have provision for some future glands to be provided later, if required.

3.20 SPACE HEATERS

The heater shall be suitable for continuous operation at 240 V AC supply voltage and shall be provided with on – off switch and fuse shall be provided for heater.

One or more adequately rated, thermostatically connected heaters shall be supplied to prevent condensation in any compartment.

3.21 DELIVERY OF GOODS AND DOCUMENTS RELATED THERETO:

Delivery of goods shall be made by the supplier in accordance with the terms specified by the BHEL in its schedule of requirements.

3.22 INCIDENTAL SERVICES:

The Supplier is required to provide any or all the services broadly outlined in the Technical specification. Any other minor incidental service related to the scope of work like providing necessary assistance whether specifically mentioned or not must be carried out by the Supplier at his own cost. All tools, Tackles Plant etc., required for completion of above works shall be brought by the Supplier.

3.23 DISCREPANCIES BETWEEN DRAWING AND SPECIFICATION:

Should there be any discrepancy between the specifications and/or schedule of prices and/or drawings or any inconsistency, error or omission in either of them, reference must be made to the BHEL/TANTRANSCO for an explanation and the Supplier will be held responsible for any errors that may occur in the work through neglect of this precaution. The explanation of the BHEL/TANTRANSCO shall be final and binding on the Supplier.

3.24 LIST OF DRAWINGS AND DOCUMENTS :

The drawings for the equipments provided by the TANTRANSCO shall be followed strictly by the bidder while designing. For the rest of the equipments, the design is in the scope of the bidder and the same got approved by the TANTRANSCO.

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The bidder shall furnish One sets of relevant descriptive and illustrative published literature pamphlets and the following drawings/documents for preliminary study along with the offer.

- (i) General outline drawings showing dimensions and shipping weights, quantity of insulating media, etc.
- (ii) Sectional views showing the general constructional features of the circuit breaker including operating mechanism, arcing chambers, contacts with lifting dimensions for maintenance.
- (iii) Schematic diagrams of breaker offered for control supervision and re- closing.
- (iv) Structural drawing, design calculations and loading data for support structures.
- (v) Foundation drilling plan and loading data for foundation design.
- (vi) The Type Test Reports
- (vii) Bill of materials shall be furnished along with drawings.

The supplier shall, within 1 weeks of placement of order submit six sets of final version of all the above drawings for BHEL/TANTRANSCO's approval. The TANTRANSCO shall communicate its comments/approval on the drawings to the supplier within reasonable period. The Supplier shall, if necessary, modify the drawings and resubmit four copies of the modified drawings for TANTRANSCO's approval within two weeks from the date of comments.. However the drawing approval does not absolve the supplier from complying with the terms of the specification.

The following should be supplied to each consignee circle along with the initial supply of equipment's ordered.

- 1) Five copies of printed and bound volumes of operation, maintenance and erection manual in English along with the copies of approved drawings and type test reports etc.
- 2) Three sets of manuals detailed in item (1) shall be supplied to the TANTRANSCO/BHEL within one week from the date of approval of drawings.
- 3) The spares for the Equipment's ordered under the scope of the Contract should also be supplied to the consignee circle along with initial supply of the breakers.
- 4) It should be noted that if the above conditions are not fulfilled the initial payment will not be released.

3.25 QUALITY ASSURANCE PLAN:

The bidder shall invariably furnish following information along with his offer. (i) Statement giving list of important raw materials including but not limited to:

- (a) Contact material
- (b) Insulation
- (c) Porcelain
- (d) Sealing material
- (e) Contactor, limit switches, etc. in control cabinet.

Name of sub-supplier for the raw materials, list of standards according to which the raw materials are tested, list of test normally carried out on raw materials in presence of bidder's representative, copies of test certificates.

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- (ii) Information and copies of test certificates as in
- (i) above in respect of bought out accessories.
- (iii) List of areas in manufacturing process, where such inspections are normally carried out for quality control and details of such tests and inspections.
- (iv) Special features provided in the equipment to make it maintenance free.
- (v) List of testing equipment available with the Bidder for final testing of breakers vis-à-vis, the type, special, acceptance and routine tests specified in the relevant standards. These limitations shall be very clearly brought out in the relevant schedule i.e. schedule of deviations from specified test requirements.

The supplier shall submit following information to the TANTRANSCO.

- 1) List of raw materials as well bought out accessories and the names of sub-suppliers selected from those furnished along with offer.
- 2) Type test certificates of the raw material and bought out accessories.
- 3) Quality assurance plan (QAP) withhold points for TANTRANSCO inspection. The quality assurance plan and hold point shall be discussed between the employer and supplier before the QAP is finalized.

The supplier shall submit the routine test certificates of bought out items and raw material, at the time of routine testing of the fully assembled breaker.

3.26 TEMPERATURE RISE :

The maximum temperature attained by any part of the equipment when in service at site under continuous full load conditions and exposed to the direct rays of the sun shall not exceed 30 deg. Cover an ambient of 50 deg. C limits specified in relevant IEC. When the standard specify the limit of temperature rise these shall be exceeded when corrected for the difference between ambient temperature at site and that specified in the approved specifications. No material shall be dispatched from its point of manufacture unless the material has been satisfactorily inspected and tested.

3.27 FITTINGS AND ACCESSORIES :

Following is a partial list of some of the major fittings and accessories to be furnished by contractor as an integral part of the equipment.

Operation mechanism housing complete with:

- (a) Locking arrangement.
- (b) Heaters equipped with automatic thermostatic control and control switch.
- (c) Cable glands.
- (d) Local/Remote change over switch.
- (e) Operation Counter.
- (f) Terminal Blocks.
- (g) Control switches to cut off control power supply.
- (h) MCCBs/MCBs are required with permanent identification marks for protection of D.C. circuits and A.C. circuits.
- (i) Two earthing terminals.

3.28 PACKING AND FORWARDING:

The equipment shall be packed in crates suitable for vertical/horizontal Transport, as the case may be and suitable to withstand handling transport and outdoor storage during transit. The supplier shall be responsible for any damage to the equipment during transit due to improper and inadequate packing and handling. The easily damageable material shall be carefully packed and marked with the appropriate caution symbols. Wherever necessary, proper arrangement for lifting, such as lifting hooks etc., shall be provided. Any material found short inside the packing cases shall be supplied by supplier without any extra cost.

The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit to their final destination as indicated in the Contract and exposure to extreme temperatures, salt and precipitation etc., during transport and open storage. Packing case size and weights shall be taken into consideration wherever appropriate, the remoteness of the 'goods' final destination and absence of heavy mechanized handling facilities, at all points in transit.

The packing, marking and documentation within and outside the package shall comply strictly with such special requirements as shall be expressly provided for in the Contract or in any subsequent instructions issued by BHEL.

3.29 SPECIFICATION FOR NITRYL BUTYL RUBBER

The gaskets are to be used in tanks exposed to Transformer mineral oil/SF6 at about 110° C.

1. Hardness should be Shore A 70 ± 5 .
2. Tensile Strength should be min. 10.8N/sq.mm (Minimum)
3. Elongation strength should be 270% (Minimum)

3.30 APPROVAL PROCEDURE

The scheduled dates for the submission of drawings as well as for, any data/information to be furnished by the Employer would be as per the following schedule. The supplier shall also submit required no. of copies as mentioned in this specification of all drawings/design documents/test reports for approval by the BHEL/TANTRANSCO. The following schedule shall be followed generally for approval.

i.	First Submission	7 days after LOI/PO
ii.	Approval/comments/by employer on Initial submission	Reasonable time
iii.	Resubmission	Within 7 days (whenever from date of comments required) Including both ways postal time.
iv.	Approval or comments	Within 2 weeks of receipt of resubmission.
v.	Furnishing of distribution copies	2 weeks from the date of last approval.

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Note: The supplier may please note that all resubmissions must incorporate, all comments given in the submission by the BHEL/TANTRANSCO failing which the submission of documents is likely to be returned. Every revision shall be a revision number, date and subject, in a revision block provided in the drawing, clearly marking the changes incorporated.

The title block of drawings shall contain the following information incorporated in all contract drawings. Please refer below mention Title block for Submission of Documents.

Title Block

Customer	M/s Tamil Nadu Transmission Corporation Limited
Project:	765/400KV Air Insulated substation Ariyalur
Contractor	BHEL

3.31 DOCUMENTS TO BE SUBMITTED ALONGWITH OFFER

Drawings, GTP, Type Test Reports and List of Past Supplies. Drawings & Documents

submitted at the time of offer shall be subject to review at contract stage.

3.31 DOCUMENTATION SCHEDULE

Following Documentation schedule to be followed per project.

S. No.	DESCRIPTION	TENDER STAGE	CONTRACT STAGE FOR APPROVAL	FINAL DOCUMENTATION	
			Prints	Prints	CDs
1	Drawings and Data Sheets	1	7	10	5
2	Drawings "As Built "	-	-	10	
3	Type Test Reports	1	7	10	
4	Erection Manuals	-	7	10	
5	Operation and Maintenance Manuals	-	7	10	
6	Manufacturing Quality Plan	-	7	10	
7	Field Quality Plan	-	7	10	
8	Inspection Test Reports	-	7	10	

Note: Drawings will also be submitted in CD/DVD in Latest AUTOCAD-2004 or Later version or any other CAD package along with conversion files for all major items. Final Documentation shall be submitted in bound volumes with details of Customer & Project etc. written on top.

SECTION-4 GUARANTEED TECHNICAL PARTICULARS

CAPACITOR VOLTAGE TRANSFORMER

1 GENERAL

- a) Name and address of manufacturer :
- b) Manufacturer's type designation :
- c) Standard applicable :
- d) Rated voltage U_r (KV) :
- e) Number of secondaries :
- f) Rated frequency (Hz) :
- g) Type of installation :

2 Guaranteed ratings :

- a) Rated output of each secondary winding (VA) :
- b) Total Simultaneous burden (VA) :
- c) Accuracy class :
- d) Rated voltage factor :
- i) Continuous :
- ii) 30 Seconds :
- iii) 5 seconds :
- e) Capacitance
- i) Of high voltage capacitance (pF) :
- ii) Of intermediate voltage capacitance :
- iii) for carrier frequency of coupling (pF) :
- f) Natural frequency of :
- g) Self tuning frequency of CVT :

SECTION-4 GUARANTEED TECHNICAL PARTICULARS

CAPACITOR VOLTAGE TRANSFORMER

- h) Band width (kHz) :
- i) Temperature rise over ambient temperature at 50 deg. centigrade :
- j) One minute power frequency test voltage of secondary winding ambient temperature at 50 deg. centigrade :
- k) One minute power frequency test voltage of H.F. terminal :
- l) One minute power frequency test voltage of capacitor (kV rms) (dry & wet) :
- m) 1.2 / 50 micro second impulse withstand test voltage of capacitor (kVp) :
- n) 250 / 2500 micro switching surge withstand voltage of capacitor (dry & wet) (kVp) :
- o) Corona extinction voltage :
- p) Radio interference voltage at $1.1 U_r / \sqrt{3}$ at 1.0 MHz in micro volts (Max) :
- q) Rated voltage of surge arrester connected at the secondary of CVT :
- 3 CONSTRUCTIONAL DETAILS
- a) Overall dimensions :
- i) Overall height (mm) :
- ii) Height upto top of terminal pad from mounting plane :

SECTION-4 GUARANTEED TECHNICAL PARTICULARS

CAPACITOR VOLTAGE TRANSFORMER

- iii) Diameter and length of terminal pad :
- iv) Material of terminal pad :
- v) Mounting dimensions and diameter of mounting holes :
- vi) Diameter of insulator :
- B) Total weight (kg) :
- C) Quantity of oil (litre) :
- D) Whether CVTs are hermetically :
- E) Details of dielectric :
- F) Standard to which oil conforma generally :
- G) Characteristics of Oil (Prior to filling) :
- A) Breakdown voltage (kV) :
- B) Dielectric dissipation constant :
- C) Water content :
- D) Gas content (ppm) :
- E) Interfacial tension at 27 degree C(117 m) :
- F) Specific resistance :
- I) At 90 degree C (ohm-cm) :
- II) At 27 degree C (ohm-cm) :
- H) Minimum clearence between phases recommended (mm) :

SECTION-4 GUARANTEED TECHNICAL PARTICULARS

CAPACITOR VOLTAGE TRANSFORMER

- I) Minimum centre to centre :
spacing recommended (mm) :

- J) Minimum distance from :
nearby earthed objects (mm)

4. LITERATURE

Whether the following are
enclosed

- A) Type test reports as per IEC :
6186/61863
- B) OGA drawing of CVT & :
terminal connector :
- C) Characteristic curve :
- D) Drawing showing clearance :
from earthed object
- E) Details of surge arrester :
connected at secondary
winding of CVT

SECTION-5

CHECK LIST FOR 765kV CVT

Put a tick mark (✓) on 'YES' if the specified requirement is met, or put a tick mark on 'NO', if the specified requirement is not met and give comments in the "Remarks" column.

Sl. No.	Parameters	Data	YES/NO	Remarks
1	Manufacturer's type designation	Bidder to furnish in Remarks Col.		
2	Type of CVT			
	a) Insulating medium	i. SF6	YES/NO	
		ii. Oil	YES/NO	
	b) Installation	Outdoor	YES/NO	
	c) Mounting	Upright	YES/NO	
3	Standards Applicable	IEC-61869, IEC-60044-5, IEC-60358, IEC-60044-4, IEC-60481, IS:3156- (P1 to P4), ANSI-C5713, ANSIC92.2, ANSI-C93.1	YES/NO	
4	Rated Voltage (kV rms)	765kV	YES/NO	
5	Standard reference range of frequencies for which the accuracies are valid	96% to 102% for protection and 99% to 101% for measurement	YES/NO	
6	High frequency capacitance for entire carrier frequency range	Within 80% to 150% of rated capacitance	YES/NO	
7	Equivalent series resistance over the entire carrier frequency Range	Less than 40 ohms	YES/NO	

Sl. No.	Parameters	Data	YES/NO	Remarks
8	Stray capacitance and stray conductance of the LV terminal over entire carrier frequency range	As per IEC 60358	YES/NO	
9	One minute power frequency withstand voltage:			
	a. Between LV(HF) terminal and earth terminal	10 kV (rms) for exposed terminals and 4 kV (rms) for terminals enclosed in a weather proof box	YES/NO	
	b. For secondary winding	3 kV (rms)	YES/NO	
10	Maximum temperature rise over design ambient temperature	As per IEC: 60186/61865	YES/NO	
11	Rated total thermal burden	300VA	YES/NO	
12	Winding parameters	As per table 2.0 b i) & b ii) of Section-1	YES/NO	
13	CVT is Capacitor voltage divider type with electromagnetic Units		YES/NO	
14	CVT is suitable for carrier coupling		YES/NO	
15	FUSES:			
	a. All Secondary windings are protected by HRC cartridge type fuses		YES/NO	
	b. Additional fuses provided for fuse monitoring		YES/NO	
16	RF Choke / Reactor			
	a. Suitable for effectively blocking carrier signals over the entire carrier freq. range 40 to 500Khz		YES/NO	
	b. Details of arrangement of the RF choke/reactor to prevent carrier signal from flowing into Potential transformer (EMU) furnished along with this offer		YES/NO	
17	HF Terminal			
	a. Brought out through suitable bushing		YES/NO	
	b. Earthing link with Fastener provided		YES/NO	

Sl. No.	Parameters	Data	YES/NO	Remarks
18	The electromagnetic unit comprises of Compensating reactor, intermediate transformer & protective and damping devices		YES/NO	
19	Additional protection <u>if required</u>			
	a. Protective surge arrestor provided		YES/NO	
	b. If alternate arrangement is provided , bidder to furnish details along with offer		YES/NO	
20	External Surface			
	Steel	i. Hot dip galvanized As per Section-3	YES/NO	
		ii. Painted As per Section-3	YES/NO	
21	Insulator /Bushing			
	a. Material			
		i. Shedded Polymer insulator	YES/NO	
		ii. Shedded Porcelain insulator	YES/NO	
	b. One piece construction without any metallic flange joint		YES/NO	
22	Specific requirements for Oil/SF6 CVT's			
	a. Oil filled CVT's:			
	i. Grade of oil	EHV grade	YES/NO	
	ii. Standard to which oil conforms	IS-335 / IEC-60296	YES/NO	
	iii. Oil filling and drain plug provided for Electromagnetic unit of CVT		YES/NO	
	iv. Oil sight glass provided for Electromagnetic unit of CVT		YES/NO	

Sl. No.	Parameters	Data	YES/NO	Remarks
	b. SF6 filled CVT's:			
	i. Standard to which gas conforms.	IEC-60376, 60376A, 60376B	YES/NO	
	ii. Suitable SF6 gas density monitoring device.		YES/NO	
	iii. NO/NC contacts available in SF6 gas density monitoring device for remote annunciation and tripping in case of SF6 leakage.		YES/NO	
	iv. Provision for online gas filling.		YES/NO	
	v. Suitable rupture disc provided to prevent explosion.		YES/NO	
23	Cantilever Strength	Not less than 500Kg	YES/NO	
24	Hermetic Sealing			
	a. Hermetically Sealed		YES/NO	
	b. Details of arrangement made for Hermetical sealing of the CVT's are available and shall be furnished for approval at contract stage		YES/NO	
	c. Details of Site test to check the effectiveness of the hermetic sealing are available and shall be furnished for approval at contract stage		YES/NO	
25	Impregnation details along with Test/Checks: to ensure successful completion of impregnation cycle are available and shall be furnished for approval at contract stage		YES/NO	
26	Name Plate			
	a. As per IEC standards, and shall clearly indicate Year of manufacture, Rated voltage, voltage factor & intermediate voltage		YES/NO	

Sl. No.	Parameters	Data	YES/NO	Remarks
	b. Shall be bilingual with Hindi inscription first followed by English. Alternatively two separate plates one with Hindi and the other with English inscriptions may be provided		YES/NO	
27	The CVT manufacturer meets the Technical Requirements specified in Section-1, Clause No. 3.0 of this Technical Specification		YES/NO	
28	Valid Type test reports as per Section-2, Clause No. 3.0, submitted along with offer		YES/NO	
29	Confirmation to clause 6.0 of Section-1 pertaining to Type Testing, Inspection, Testing & Inspection Certificate		YES/NO	
30	List of Deviations if any, is attached along with offer		YES/NO	
31	List of all special tools and tackles as per clause 7.0 of Section-1 of this technical Specification and the scope thereof BHEL/ supplier shall be furnished along with the offer		YES/NO	
32	Following Documents are attached along with the offer:			
	a. Checklist duly filled		YES/NO	
	b. Documents to support the Technical Requirements of the Equipment manufacturer 'as per clause 3.0 of Section-1' of this Technical Specification furnished along with the offer		YES/NO	
	c. Catalogue/ leaflets		YES/NO	
	d. Drawings		YES/NO	