



ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

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INVITATION TO e-BID UNDER SINGLE STAGE TWO BID SYSTEM

Tender No. & Date : SGI2487P20 dated 16.09.2019

Tender Fee : Not Applicable

Bid Security : INR 1,71,800.00

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Bid Closing on : 03.10.2019 at 11:00 (IST)

Bid Opening on : 03.10.2019 at 14:00 (IST)

Bid Validity : Bid should be valid for 120 days from bid closing date.

Bid Bond Validity : Bid Bond should be valid upto 30.04.2020.
(Bid bond format has been changed. Please submit bid bond as per revised format)

Performance Guarantee : Applicable @ 10% of order value.

Integrity Pact : Applicable

OIL INDIA LIMITED invites electronic bids from Indian bidders under SINGLE STAGE TWO BID SYSTEM through its e-procurement site for the item detailed below –

ITEM NO.	MATERIALS DESCRIPTION	QTY	UNIT
10	1 MVA 6.6/0.433 KV DRY TYPE TRANSFORMER (Technical Specification as per Annexure – AA)	2	NO.
20	INSTALLATION & COMMISSIONING OF ITEM 10	1	AU
30	LT PANEL	1	NO.
40	INSTALLATION & COMMISSIONING OF ITEM 20	1	AU

The general details of tender can be viewed by opening the eRFx [Tender] under RFx and Auctions in the e-portal through Guest Login. The details of tendered items can be found in the Item Data and details uploaded under Technical RFx. The bidding document is available in the Technical RFx -> External Area -> Tender Documents.

STANDARD NOTES

- 1.0 The tender will be governed by “General Terms & Conditions for National Tender (National Competitive Bidding)” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005(For e-tenders).
- 2.0 This Bidding document consists of:
 - (i) Annexure AA : Technical Specification and Terms & Conditions
 - (ii) Annexure BB : Bid Rejection Criteria
 - (iii) Annexure CC : Commercial Compliance Sheet
 - (iv) Annexure DD : Price Schedule
 - (v) Annexure EE : Annual Turn Over and Net Worth Certificate
 - (vi) Annexure FF : Undertaking towards submission of authentic information/documents
 “General Terms & Conditions for National Tender (National Competitive Bidding)” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005(For e-tenders).
- 3.0 Bidders without having E-tender Login ID and Password should complete their online registration at least 7(seven) days prior to the scheduled bid closing date and time of the tender. For online registration, Bidder may visit the OIL’s E-tender site <https://etender.srm.oilindia.in/irj/portal>.
- 4.0 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.
- 5.0 Bidders to note that Govt. of India under Micro, Small and Medium Enterprises Development (MSMED) Act 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. A new Clause on applicability of Public Procurement Policy for procurement of goods from Micro and Small Enterprises (MSE) in the tender is furnished vide Amendment to General Terms and Conditions for Global Tender (MM/GLOBAL/E-01/2005). Bidders are requested to take note of the same and to submit their offers accordingly.
- 5.1 For availing benefits of Purchase Preference under Public Procurement Policy, the interested MSE Bidders must ensure that they are the manufacturer of tendered item(s) and registered with the appropriate authority for the said item(s). The technical offer of such MSE Bidders must include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Purchase Preference of 15% (fifteen percent) shall be extended to the eligible MSE Bidder (i.e. Manufacturer of tendered goods for procurement) over non-MSE L1 Bidder and PO shall be awarded for full tender quantity on such MSE bidder, subject to matching their quoted rates/costs with non-MSE L1 Bidder.
- 5.2 **MSEs Units (manufacturers/Service Providers only and not their dealers/distributors) who are already registered with District Industry Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are exempted from payment of Bid Security (EMD) irrespective of their product category & capacity, subject to submission of valid MSME registration certificate issued by appropriate authority.**
- 5.3 Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority. It is in the interest of such MSE Vendors to furnish a copy of complete certificate to the concerned tender handling officer of OIL at least seven (7) days prior to the scheduled Bid Closing Date of the tender. Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company.
- 6.0 **Purchase Preference (Linked with Local Content) (PP-LC) is not applicable against this tender.**
- 7.0 Bidder seeking benefits of MSME and Purchase Preference Policy (Linked with Local Content) shall clearly indicate the same in the tender with proper documents as stipulated in the tender.

- 8.0 OIL INDIA LIMITED (OIL) has upgraded its E-tender Portal. As part of the new system, the intending bidder must have Encryption Certificate along with Digital Signature Certificate (DSC) of Class III [Organization]. **All the Bids must be Digitally Signed using “Class III” digital certificate (e-commerce application) with ‘Certificate Type: Organisation Certificate’ as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than “Class 3 with Organisation’s Name” digital certificate, will be rejected.**
- 9.0 EMD must be paid either through online mode or submitted as Bank Guarantee/LC. No DD/Cheques/Cashier Cheque or any other mode will be acceptable.
- 9.1 OIL has made arrangement for online confirmation of Bank Guarantee through SFMS Platform with Axis Bank, Guwahati. Therefore, bidders submitting Bid Security in the form of Bank Guarantee must route the BG through SFMS platform as per following details –
- a. (i) MT 760/MT 760 COV for issuance of bank guarantee
(ii) MT 767/MT 767 COV for amendment of bank guarantee*
- The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Guwahati Branch, IFS Code – UTIB0000140, Branch Address – Axis Bank Ltd., Guwahati Branch, Chibber House, G.S. Road, Dispur, Assam, Pin – 781005.*
- b. The Bidder shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee.*
- 9.2 Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank in India shall not be acceptable.
- 10.0 Bidders are requested to go through the ‘Vendor User Manual’, ‘Guidelines to Bidders for participating in OIL e-tenders’, ‘New Instruction to bidders for submission of bid’ and ‘Vendor User Manual for e-tendering’ available in the e-portal home page before submitting offer in system.
- 11.0 Deemed export/Custom Duty benefits are not applicable against this tender and bidders should furnish prices without considering these benefits.
- 12.0 Please note that all tender forms and supporting documents are to be submitted through OIL’s e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender no. and Due date to **The Deputy General Manager - Materials (PL), Oil India Limited (Pipeline Headquarter), P.O. Udayan Vihar, Guwahati -781171 before 14.00 Hrs. IST on the Bid Closing Date** mentioned in the Tender.
- a) Bid Security(EMD) submitted in the form of Bank Guarantee.
b) Detailed Catalogue (if any).
c) Any other document required to be submitted in original as per tender requirement.
- All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in triplicate.
- 13.0 Bidders are requested to examine all instructions, forms, terms and specifications in the tender. Failure to furnish all information required as per the tender or submission of offers not substantially responsive to the bid in every respect will be at the bidder’s risk and may result in rejection of its offer without seeking any clarifications.
- 14.0 Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.
- 15.0 Original Bid Closing Date shall be considered by OIL for evaluation of BRC Criteria in case of any extension of the original bid closing date.

- 16.0 Along with the technical bid, bidders must submit duly filled undertaking as per format provided vide **Annexure-FF** as undertaking towards submission of authentic information/documents.
- 17.0 The tender is invited under **SINGLE STAGE-TWO BID SYSTEM**. The bidder has to submit both the “TECHNO-COMMERCIAL UNPRICED BID” and “PRICED BID” through electronic form in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The “Techno-commercial Unpriced Bid” shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Price Schedule to be uploaded as attachment in the Attachment Tab “Notes and Attachments”. Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.
- 18.0 In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that “TECHNO-COMMERCIAL UNPRICED BID” should contain details as mentioned in the technical specifications as well as BEC/ BRC and upload the same in the Technical Rfx Response-> User -> Technical Bid. No price should be given in above Technical Rfx otherwise the offer will be rejected. Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical Rfx Response-> User -> Technical Bid only. The “PRICE BID” must contain the price schedule and the bidder’s commercial terms and conditions. Details of prices as per Price Schedule can be uploaded as Attachment under the attachment option under “Notes & Attachments”.


Notes and Attachments

→ Only price details should be uploaded

Technical attachments

→ All technical bid documents except price details

Bidders are requested to go through the ‘New Vendor Manual’, ‘Guidelines to Bidders for participating in OIL e-tenders’, ‘New Instruction to bidders for submission of bid’ and ‘Vendor User Manual for e-tendering’ available in the e-portal home page before submitting offer in system.



Oil India Limited e-Procurement

User ID *

Password *

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[Supplier Enlistment for E-Tender](#)

[Important Note for New Portal Users:](#)

[Click here to View Compatibility Settings](#)

[General Guidelines to bidders](#)

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Click here for the New Manual & Instruction

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- 19.0 For the convenience of the qualified Bidders and to improve transparency, the rates/costs quoted by bidders against OIL’s e-tenders shall be available for online viewing by such Bidders whose price bids are opened by Company. A Bidder can view item-wise rates/costs of all other such peer bidders against the tender immediately after price bid opening, if the e-tender is floated by Company with PRICE CONDITION. In case the Price Bid is invited by Company through attachment form under “Notes & Attachments” (i.e., NO PRICE CONDITION), Bidder must upload their detailed Price-Bid as per the prescribed format under “Notes & Attachment”, in addition to

filling up the “Total Bid Value” Tab taking into account the cost of all individual line items and other applicable charges like freight, tax, duties, levies etc.. Under NO PRICE Condition (i.e. Price Bid in attachment form), the “Total Bid Value” as calculated & quoted by the Bidder shall only be shared amongst the eligible bidders and Company will not assume any responsibility whatsoever towards calculation errors/omissions therein, if any. Notwithstanding to sharing the “Total Bid Value” or the same is whether filled up by the Bidder or not, Company will evaluate the cost details to ascertain the inter-se-ranking of bidders strictly as per the unloaded attachment and Bid Evaluation Criteria only. Online view of prices as above shall be available to the Bidders only upto seven days from the date of Price-Bid opening of the e-tender.

- 20.0 Bidders are requested to examine all instructions, forms, terms and specifications in the tender. Failure to furnish all information required as per the tender or submission of offers not substantially responsive to the bid in every respect will be at the bidder’s risk and may result in rejection of its offer without seeking any clarifications.
- 21.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that all documents which are to be submitted in a sealed envelope are also submitted at the address mentioned in note 12.0 above before **14:00 Hrs (IST)** on the bid closing date failing which the offer shall be rejected.
- 22.0 Other terms and conditions of the tender shall be as per “General Terms & Conditions for National Tender (National Competitive Bidding)” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005(For e-tenders). However, if any of the clause of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) contradicts the clauses in the General Terms & Conditions of the tender and/or elsewhere, those mentioned in the BEC/BRC shall prevail.
- 23.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer may be summarily rejected.
- 24.0 The **Integrity Pact** is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure XII of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL’s competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder’s authorized signatory who sign the Bid. The name of the OIL’s Independent External Monitors at present are as under:
 1. Shri Rajiv Mathur, IPS(Retd.),
Ex-Director, IB, Govt. of India
E-mail id: rajivmathur23@gmail.com.
 2. Shri Jagmohan Garg
Ex-Vigilance Commissioner, CVC
E-mail: jagmohan.garg@gmail.com
 3. Shri Rudhra Gangadharan, IAS (Retd.)
Ex-Secretary, Ministry of Agriculture
E-mail: rudhra.gangadharan@gmail.com
- 25.0 **No press advertisement will be published regarding amendment to Bidding Document or extension of Bid Closing Date. The same will be uploaded in OIL’s website and informed to all prospective bidders who have received the bidding documents. Bidders to keep themselves updated.**

Sd-
(M.B. SINGHA)
SR. MANAGER MATERIALS (PL)
FOR GENERAL MANAGER - MATERIALS (PL)
FOR: CHIEF GENERAL MANAGER (PLS)

ANNEXURE - AA

SCOPE: Supply, installation, testing & commissioning of sub-station comprising of 2 nos. 1 MVA 6.6/0.433 KV dry type transformer and one no LT Panel with 2 no. 2000A incomer, one bus coupler and outgoing as mentioned for integration of existing loads with new GEG commissioned under NBPS Phase-I.

1.0 TRANSFORMER 6.6/0.433 KV

1.1 SCOPE

This specification covers supply, testing and commissioning of 2 nos. 1000kVA, 6.6KV/433V Dry Type Transformer, designed for indoor installation. The transformer to be supplied against this specification is required for vital installations where continuity of service is very important. The design, materials and manufacture of the equipment shall, therefore be of the highest order to ensure continuous and trouble-free service over the years.

1.2 STANDARDS

The latest revisions of the following Codes and Standards listed shall be applicable for the Equipment/ materials covered in this specification.

IS 11171 & 2026	: Dry type power transformer
IS 10028 (Part II & III)	: Installation and Maintenance of Transformer.
IS 2099	: Bushing
IS 2705	: Current Transformer
IEC 60529	: Classification of degree of protection provided by enclosures

1.3 GENERAL CONSTRUCTION

All the MS parts shall be either Hot dipped galvanized or cold galvanized to make them corrosion free. The core shall be made up of high grade low loss CRGO (cold rolled grain oriented) silicon steel. Both low & high voltage windings shall be made of copper conductor. The class of winding insulation (both HV & LV) shall correspond to class 'F'. The construction of the windings of the transformer shall be such that no creepage path is found even in dusty & corrosive ambient conditions. The core coil assembly shall be housed in a prefabricated metal enclosure.

The enclosure shall be fabricated with mild steel CRCA sheets with adequate provision for ventilation. Finally, the external and internal surfaces of the enclosure shall be powder coated with the specified shade of paint.

1.4 GENERAL REQUIREMENTS

1.4.1 The transformer shall have thermal and dynamic ability to withstand external short-circuit as per clause 9 of IS 2026 (Part I) 1977 and clause 5 of IS 11171-1985.

1.4.2 Capacity and Rating: Continuous rating specified shall be irrespective position of tap changer. Indoor transformers shall be suitable for IP-23 protection.

1.4.3 Temperature Rise: As per IS 11171-1985.

The reference ambient temperatures assumed for the purpose of this specification are as follows -

- (a) Maximum ambient air temperature : 45 degree C.
- (b) Minimum ambient temperature : 5 degree C.
- (c) Class of insulation : "F"
- (d) Altitude of site of installation : Not exceeding 150 meters.

1.4.4 Cooling: Unless otherwise specified the transformer cooling shall be air and naturally cooled (AN).

1.4.5 Tap Changing Device: Preferred tapping range is +5% to -5% in 2.5% steps by means of "off-load" tap changing links or tap switch. The device shall be provided on HV for HV Voltage to keep LV Voltage constant.

1.4.6 Terminal Markings Connections: Relevant provisions of IS: 2026 (Part-IV)-1977 shall be applicable.

1.4.7 Voltage Ratio: The transformer shall be suitable for a voltage ratio of 6.6KV/433V.

1.4.8 Vector Group: The winding connections shall conform to vector group Dyn11.

1.4.9 Accessories: The transformer shall be with metal enclosure with HV and LV terminations as specified both on HV and LV side. The LV side shall be suitable to receive LV cable inter-connection suitable for full load current of the transformer.

1.4.10 Fittings: The transformer shall be complete with the following fittings: -

- (a) "Off-load" type tap changing link
- (b) RTD temperature controller.
- (c) Lifting lugs for all transformers.
- (d) Bi-directional /Unidirectional Rollers to be specified.

- (e) Rating diagram and terminal marking plate for all transformers with OIL's PO No.
- (f) Additional Neutral separately brought out on a bushing for earthing for all transformers.
- (g) The following shall be supplied along with the transformers, as mandatory spares:
 - Operating spares :1 set
 - HT Bushings :3 Nos.
 - LT Bushing :4Nos.

1.4.11 Transformer HV winding shall be suitable for vacuum circuit breaker switching and appropriate surge arrester shall be provided.

1.5 SPECIFICATIONS

Transformer 1000kVA, 6.6KV/433V, 3 Phases, 50 Hz, Both HV & LV winding copper conductor, Dry type, natural air cooled transformer for indoor installation & as per following specifications:

1.5.1 GENERAL

- (a) Applicable Indian Standard : IS: 171 and IS: 2026 with latest amendments.
- (b) Service duty : Continuous.
- (c) Installation : Indoor.
- (d) Auxiliary power supply : 230V AC
- (e) Control Voltage : 230V AC

1.5.2 SITE CONDITION

- (a) Ambient Temperature
 - i) Maximum Ambient air temperature : 45°C
 - ii) Minimum Ambient air temperature : 5.0°C
- (b) Maximum humidity at site (at 40 ° C) : 98 %
- (c) Surrounding atmospheric condition: Humid
- (d) Site Altitude : 150 mtrs.
- (e) Seismic co-efficient : As per IS: 1893.
- (f) Rainfall : 200 cm (annually)

1.5.3 RATING AND GENERAL DATA:

- (a) Rating: 1000kVA
- (b) No. of phases: 3.
- (c) Frequency: 50 ± 3 %
- (d) Type of Insulation: Class-F. Temp. Rise-Designed to withstand 140 degree ° C
- (e) Partial discharge: As per IS-11171, IS-6209.
- (f) Type of cooling: AN
- (g) Installation: Indoor
- (h) Vector group: Dyn 11
- (i) Percentage impedance: 5%. Tolerance as per IS-2026.
- (j) Nominal system voltage: 6.6KV/433V
- (k) Type of neutral earthing: Solidly grounded Neutral.
- (l) Symmetrical short circuit withstands capacity: As per IS-11171.
- (m) Rated short duration power frequency withstands voltage: As per IS 11171.
- (n) Rated lightning impulses withstand voltage: As per IS 11171 (List-2). As Vacuum circuit breaker will be used as incomer to the transformer, BIL voltage shall be 75KV.
- (o) Transformer noise level when measured at 1M distance should be as per NEMA TR-1.
- (p) Water absorption (24hrs @25C): less than 0.05%
- (q) Dielectric Strength: Minimum of 3200 volts/mil dry
- (r) Dissipation Factor: Max. 0.02 @25 degree C to reduce aging of insulation.

1.5.4 TAP CHANGER

- Type : Off-Circuit Tap Links
- Total tapping range : -5.0 %, to +5.0 %
- Tapping steps : In steps of 2.5 %.
- Markings Shall be clear enough to indicate the tap position.

1.5.5 TERMINAL ARRANGEMENT

HV winding line end : Cable box

LV winding line end : Cable box

One neutral bushing outside the cable box shall be provided for grounding.

1.5.6 BUSHING

Made from non-hygroscopic epoxy resin cast material suitable for site conditions mentioned in Clause 5.2 above & conforming to IS-2099

1.5.7 CABLE BOX

- i) HV cable box should be suitable for termination of 1 no 3C x 300 sq. mm, XLPE, armoured, Aluminium conductor cable with heat shrink type cable termination. The bottom plate shall be detachable type and 1 no. heavy duty single compression cable glands suitable for 3Cx300 sq.mm XLPE armoured cables shall be fitted.
- ii) LV cable box should have brought out bus bars of suitable rating & size for termination of 8 nos. of 3½ x 300 sq. mm PVCA/XLPE Aluminium cables. The cable box should have detachable cable gland plate fitted with suitable heavy duty single compression cable glands for the cables mentioned above. Support bar in LV cable box should be made up of fiber glass.
- iii) HT and LT cable boxes shall be bottom entry type and Bottom detachable gland plates made from 3.0 mm thick MS sheet shall be provided for all cable entries, suitable cable gland shall be provided for the above cables.
- iv) Terminals should be marked as per IS: 2026 -1977.

1.5.8 TRANSFORMER CORE

- i) Material: High grade cold rolled grain oriented silicon steel.
- ii) Structure: Grounded and sharp corners avoided.
- iii) Lamination: Treated and coated with suitable insulations. The core limbs & yokes should be branded by means of resin glass tape to reduce vibration & noise.

1.5.9 TRANSFORMER WINDING:

The winding material should be high conductivity 99.99% electrolytic grade copper. The insulation should be Cast Resin type, Class-F. Conductor should have thermally upgraded paper (Nomex) insulation reinforced with fibre-glass. The coil assembly is to be impregnated & cast under vacuum with epoxy resin for achieving non-hygroscopic, acid & alkali resistant insulation. The complete winding should have smooth cylindrical finish after impregnation to ensure high mechanical strength. The thickness of resin should be uniform. The insulation should be self-extinguishing type. Mounting of the winding to the transformer case shall be of vibration resistance pad placed uniformly in all direction.

- i) The windings/connection of transformer shall be braced to withstand shocks, which may occur during transport or due to short circuit, repeated peak loads and other transient conditions during service.
- ii) Windings shall be subjected to a shrinkage treatment before final assembly so that no further shrinkage occurs during service.
- iii) The conductors shall be transposed at sufficient intervals in order to minimise eddy currents and equalize the distribution of currents and temperature along the windings.
- iv) Windings shall not have sharp bends which might damage insulation and /or produce high dielectric stresses.
- v) Coils shall be supported using dried and high pressure compressed wedge type insulation spacers at frequent intervals.
- vi) All threaded/bolted connections shall be locked. Leads from the winding to the terminal board and bushings shall be rigidly supported to prevent injury during short circuits/vibration.
- vii) Permanent current carrying joints in the windings and leads shall be welded or brazed.
- viii) Digital Winding temperature scanner connected with three nos. RTDs, one each for each LV winding, should be provided in a metallic enclosure (Marshalling box) that is mounted on the main enclosure. The scanner shall have potential free NO contacts to provide indication, alarm & trip contacts. Two sets of additional contacts to be provided to connect 2 nos. cooling fans so that they start if the temp rises above a set value say above 75 degree. Winding temperature indicator should show maximum temperature attained. The RTDs should be properly wired up to the scanner terminals. Temperature setting of each contact shall be independently adjustable at site.

1.5.10 ENCLOSURE

Enclosure for transformer shall be fabricated of minimum 14 SWG gauge properly cleaned degreased and painted as per manufacturer's standard practice. The core & winding assembly should be housed inside a sheet steel enclosure with removable inspection & tap changer covers. The enclosure should offer IP-23 protection as per IS-2147 and should have suitably designed louvers for circulation of cooling air. All the gaskets should be of neoprene rubber. All non-energized metallic parts of the transformer shall be grounded. No live part/bushing should be left exposed. The enclosure should cover all such live parts.

1.5.11 EARTHING

Earthing shall be as per IS-3043. All metal parts of the transformer with the exception of individual core laminations core bolts and associated individual clamping plates shall be earthed internally. Suitable arrangement shall be made for earthing of neutral externally.

1.5.12 WIRING

All internal wiring shall be done with 1.1 KV grade, single core, FRLS PVC insulated tinned copper multi stranded cable of standard size of 2.5sqmm with proper lugs. Ring lugs shall be used at all connections such as CTs connection etc. All terminal strips shall have minimum 2 nos. spare terminals to accommodate any modification required during commissioning /operation. All terminals shall be accessible for testing and troubleshooting/maintenance. All cable shall have ferules.

1.5.13 NAME PLATE

Transformer shall be furnished with a non-corrosive diagrammatic name plate permanently attached with non-corrosive hardware with following information:

- i) KVA rating
- ii) Primary and secondary voltage
- iii) Primary and secondary current
- iv) Frequency
- v) Nos. of phases
- vi) Percentage of impedance
- vii) Types of cooling
- viii) Connection & symbol
- ix) Tap configuration
- x) Insulation system and rated maximum temperature rise.
- xi) Sound level
- xii) K- factor rating (if available)
- xiii) Year of manufacture
- xiv) Design impedance.
- xv) Manufacturer's name
- xvi) Net weight.
- xvii) IS standard.
- xviii) OIL's P.O. no. and date.

1.5.14 LIFTING HOOK

Suitable Lifting hook shall be provided on the top of the transformer for transportation/ installation of transformer.

1.5.15 LIST OF FITTINGS AND ACCESSORIES

- i) HV bushings inside HV cable box: 3 nos. rated for 11kV.
- ii) LV bushings in side LV cable box: 4 nos. (3P+1N) rated 433 Volts
- iii) Outside LV cable box: 1 no. for grounding.
- iv) Digital Winding temperature scanner connected with 3 nos. of RTDs, one each for each LV winding.
- v) Earthing terminals: 2 nos. for body earthing.
- vi) Jacking lugs.
- vii) Inspection cover: 2 nos. placed in opposite site
- viii) Base channels with bi-directional rollers: 2 nos.
- ix) Any other accessories which bidders think essential may also be included as optional.

1.6 MAKE

Crompton Greaves/Pete Hammond/Raychem/Schneider/ABB/Voltamp/Siemens

1.7 INSPECTION

- i) All the routine tests as per IS: 11171 are to be carried out in presence of OIL's Engineer at manufacturer's works.
- ii) The supplier will give intimation to OIL, 15 days in advance prior to commencement of tests so that OIL can depute representative for witnessing tests in time. **All to & fro charges, boarding/ lodging of OIL Engineers shall be borne by OIL. Bidder not to include the same in their quote.**
- iii) The transformers shall be cleared for dispatch only if the test results comply with the specifications and testing results are within the tolerance limits.
- iv) Materials/equipment failed to conform to the specifications/during testing, OIL's representative shall have the right to reject the materials and in that case, the supplier will either replace the rejected materials or make alterations necessary to meet specifications requirements free of costs.

1.8 GENERAL TERMS AND CONDITIONS

- i) Party should furnish all relevant technical particulars as per IS:2026 (1977), Part-I along with the offer.
- ii) Bidder shall mention in their offer the minimum ventilation requirement of transformer room.
- iii) Bidder must indicate the storage procedure for the transformer in case the transformer is left un-energized.
- iv) List of commissioning checks required for the transformer must be enclosed with the offer.
- v) Transformer winding shall be specially braced to withstand to thermal and mechanical stresses of harmonic current and voltage.
- vi) Bidder should mention the no load losses, load losses & efficiency at 50% & 75% load (0.8 pf) on transformer with the offer
- vii) Temperature rise test shall be carried out on transformer for full load current and up to 90-degree centigrade temperature. It takes nearly 8-12 hrs to complete test. Party should confirm in the offer about the tests to be carried out.
- viii) Partial discharge test is to be carried out on transformer. Party should also confirm about the test in their offer
- ix) Party should get the detail transformer drawings approved from OIL prior to manufacturing of the transformer.

1.9 TEST

The following type & special tests shall be carried out on similar transformer and test certificates to be furnished along with the offer.

1.9.1 TYPE TEST

The transformer shall be type tested at CPRI/NABL or any government approved laboratory and type test certificates carried out on similar transformer should be furnished along with the offer. These type test certificates should not be more than 5 (five) years old on the date of original bid opening. Offers without these type certificates may not be considered for evaluation.

Type test shall constitute the followings:

- (a) Measurement of winding resistance,
- (b) Measurement of voltage ratio and check of voltage vector relationship,
- (c) Measurement of impedance voltage, short circuit impedance and load loss,
- (d) Measurement of no load loss and current,
- (e) Separate-source voltage withstand test,
- (f) Induced overvoltage withstand test,
- (g) Lightning impulse test,
- (h) Temperature-rise test and
- (i) Short-circuit test.

1.9.2 SPECIAL TESTS

- i) Partial discharge test as per IS: 6209-1982 and with Appendix A of IS: 2026 (Part 3)-1981.
- ii) Measurement of acoustic sound.

1.10 DOCUMENTS TO BE SUBMITTED BY THE BIDDER

- i) Manufacture's test certificates for all the components & assemblies as required by IS-11171 with latest amendments should be submitted to us along with the materials.
- ii) Bidder's shall fill up the technical particulars in 1.11 below and submit along with the offer.

1.11 TECHNICAL PARTICULARS

The following Technical Particulars to be furnished by the bidder along with their offer:

- i) Type of transformer:
- ii) Rating of transformer:
- iii) Primary Winding Details:
- iv) Secondary Winding Details:
- v) Reference standards:
- vi) No of Phases:
- vii) Rated Frequency:
- viii) Vector Group
- ix) Type of Cooling:
- x) Impedance Voltages:
- xi) Tapping on HV:
- xii) Enclosure type (IP):
- xiii) No Load losses at rated voltage:
- xiv) No load current at rated voltage:
- xv) Total losses (Cu+ Iron) at rated load:
- xvi) Insulation class:
- xvii) Insulation level:
- xviii) Average temp rise of windings over ambient temp (50 Degree):
- xix) Dimension (L X B X H):
- xx) Winding material:
- xxi) Efficiency at unity PF at full load:
- xxii) Efficiency at unity PF at half load:
- xxiii) Percentage Regulation at unity PF:
- xxiv) Percentage Regulations at 0.8 PF (Lag)
- xxv) Noise level:

1.12 GUARANTEE:

The supplier shall guarantee the equipment for a period of 18 months from the date of supply or 12 (twelve) months from the date of commissioning, whichever is earlier, against defects arising from faulty design, material and workmanship. Guarantee certificate shall be duly signed and stamped by the supplier and shall be provided along with the dispatch documents.

2.0 INSTALLATION, TESTING AND COMMISSIONING 1000 KVA TRANSFORMER

2.1 GENERAL NOTES ON COMMISSIONING:

- 2.1.1 The supplier shall confirm that Installation, Testing and Commissioning jobs shall be carried out under the direct supervision of an Engineer/an electrical supervisor holding a valid Electrical Supervisor's Certificate of Competency. The copy of certificate of competency should be submitted prior to the commencement of the commissioning jobs.
- 2.1.2 All tools & instruments for commissioning activities shall be arranged / provided by the supplier.
- 2.1.3 Installation, Testing and Commissioning of transformers shall be carried out by specialist /engineer from manufacturer. All pre commissioning testing of transformer like magnetic balance test, vector group test, IR test etc. are required to be carried out by party at site before energization of the transformer.
- 2.1.4 **Transformer loading, unloading, lifting, shifting are all in supplier's scope. OIL will not provide any assistance in this regard.**
- 2.1.5 The commissioning of the transformer shall be considered as complete with the submission of the commissioning test records, operating & maintenance manuals, spares list of the transformer etc. to OIL.
- 2.1.6 Supplier shall arrange for electrical power required for erection & commissioning activities of transformer. OIL will not provide any electrical power source.
- 2.1.7 **Bidder shall arrange for to & fro travel to the installation site, local conveyance and boarding & lodging during the installation. All charges shall be borne by the bidder and should be quoted accordingly which shall be**

inclusive of GST and all other taxes including Income Tax/Corporate Tax/ Personal Tax shall be deducted at source.

2.2 TECHNICAL NOTES ON COMMISSIONING:

2.2.1 Commissioning: Any material/spare not specified in the NIT but required for commissioning shall be supplied by party.

2.3 PRE-COMMISSIONING CHECKS:

After completion of installation of the transformer at the specified site, prior to energizing of the transformer, the following checks and tests shall be carried out on transformer:

- i) Assembly, check as per manufacturer's drawings and instructions.
- ii) Physical inspection for damages, external defects and remedial actions, if any.
- iii) Check for proper fixing on foundation, levelling and tightness of foundation bolts.
- iv) Check for proper tightness of transformer & its control devices, accessories, cables and earth connections.
- v) Check meters, if any.

2.4 EARTHING:

Bidder shall arrange for supply, burying of Chemical Earth Electrode and making masonry enclosure along with connecting electrodes. For transformer body 4(three) chemical earth electrode interconnected through 50x6 mm GI strip to be constructed along with masonry enclosure and FRP cover. Transformer bodies to be connected with the grid through two nos. GI strip of same size in two separate and distinct position.

For transformer neutral 2(two) chemical earth electrode interconnected through 50x6 mm GI strip to be constructed along with masonry enclosure and FRP cover. Transformer neutrals to be connected with the grid through two nos. stranded single core copper cable of size 16 sqmm (minimum) in two separate and distinct position.

Earth Electrode should be heavy duty, sealed CPRI approved chemical electrode with suitable backfilling chemical, of size 80 mm dia. 4 mm thick 3000 mm length.

Size of masonry enclosure should be 600 mm X 600 mm X 600 mm with FRP cover plate of suitable size.

3.0 LT PANEL

3.1 FEATURES:

The PCC Panel shall have the following features:

- 3.1.1 Panel shall be indoor, cubicle type with provision of extension of panels in future.
- 3.1.2 Panel shall be built on Self-supporting, floor mounting, rigid framework.
- 3.1.3 The frame of the panel shall be sufficiently strong and made of 2.0 mm thick CRCA sheet having proper profile for rigidity and adequate strength with a validated and proved design. The frame shall be mounted on a bottom structure made from 75 x 40mm MS channel.
- 3.1.4 Panel shall be sheet steel clad, cubicle type made of 2.0mm thick MS CR sheet.
- 3.1.5 Panel shall be Dust / vermin proof and weatherproof with IP52 degree of protection.
- 3.1.6 Bottom detachable gland plates made from 3.0mm thick MSCR sheet shall be provided for all cable entries
- 3.1.7 The entire metal work shall be treated with nine tank antirust treatment as per IS and then powder coated in DA Grey color. Documentary evidence confirming the same shall be provided with the offer.
- 3.1.8 Non-deteriorating Neoprene rubber gaskets shall be provided between all joints.
- 3.1.9 Panel shall be designed for Ambient of 45°C (Max)/ 5°C (Min) and Humidity-95% (Max).
- 3.1.10 All feeders shall be suitable for operation from front side and shall have provision of inspection from backside.
- 3.1.11 All panel doors shall be provided with single turn latches for opening / closing.
- 3.1.12 Internal barriers shall be provided between cubicles to provide Form-2 separation as per IEC to prevent transmission of flashover from one panel to other panels.
- 3.1.13 Danger plates shall be fitted on front and back of the panel.
- 3.1.14 Adequate nos. of lifting lugs shall be provided on top.

- 3.1.15 Panel shall be LOTO compliant.
- 3.1.16 Ventilation louvers shall be guarded with wire mesh.
- 3.1.17 Internal earthing shall be provided for all equipment having earthing terminal and panel doors with suitably rated, PVC insulated, flexible copper earth wires or copper braids of suitable rating as per IS.
- 3.1.18 Earthing bus shall be provided at bottom of the panel. Earthing Bus shall be made of 50x5 mm GI straps with 80 micron galvanization thickness. Brought out studs shall be provided on two sides complete with suitably sized zinc passivized double nuts and spring washers. Earth bus shall have holes drilled for connection with main earth electrodes and earth cable/ strap of outgoing feeders. All feeders shall be adequately connected to the earth bus.
- 3.1.19 BIS ref.: Confirming to IS-8623, IS 13947
- 3.1.20 Legend 'LT POWER CONTROL CENTRE' shall be provided at the top center.

3.2 PANEL COMPARTMENTS / SECTIONS

The panel shall broadly have the following compartments / sections.

- i) Incomer section
- ii) Bus Coupler
- iii) Bus bar Chamber
- iv) Outgoing section
- v) Cable chamber/cable alley

3.2.1 INCOMER SECTION:

2 nos. 2000 Amps Four Pole Air Circuit Breakers housed in a sheet steel enclosure.

Legend: 1. INCOMER 1

2. INCOMER 2

The incomer units shall be complete with brought out terminals of suitable rating and single compression cable gland suitable for 4no. x 3½ C x 300 mm², PVCA, Al cable provided on the bottom detachable gland plate. Suitably rated aluminium lugs for all incoming cable connections shall be supplied with the brought out terminals.

Incoming Feeder Instruments

Each incoming feeder shall comprise the following instruments in an instruments panel complete with all necessary interconnections, fine wiring and duly tested:

- 1. Digital Multi-function meter for each incomer
- 2. TNC switch for ACB operation.
- 3. LED type Indication Lamps for 'Phase Healthy' indication in Red, Yellow and Blue in color: 3 nos. for each incomer
- 4. Digital Ammeter of Class 1.0 for each incomer
- 5. Digital Voltmeter (0-500V) for each incomer.
- 6. Auxiliary power supply of voltmeter shall be 230V and shall be connected with separate HRC fuse and link system.

3.2.2 BUS COUPLER

1 no. 2000 Amps Four Pole Air Circuit Breakers housed in a sheet steel enclosure and as specified in sec 3.0.

3.2.3 BUS CHAMBER

The bus chamber shall be sheet steel clad having front and rear bolted covers and shall consist of 1 set TP & N electrolytic grade, high conductivity Aluminum Bus Bars, conforming to BIS. Current rating of bus bar sections shall be 2000 amps suitable for 415 V AC, 50 Hz system. Neutral bar shall be of same size as phase bus. The bus-bar shall be insulated with heat shrinkable PVC sleeves and shall be supported at required intervals with non-hygroscopic, non-deteriorating, and non-inflammable SMC / FRP supports having adequate mechanical strength and a high tracking resistance, to withstand short circuit fault levels up to 75 kA for 1 sec.

The manufacturer of the panel must have test certificate and temperature rise certificate for busbar fault level of 75kA for 1 sec. A copy of the test certificate shall be enclosed with the offer.

3.2.4 OUT GOING SECTION

- 1. 1600A 4P ACB : 6 nos.
- 2. 400A 4P MCCB Outgoing MCCB : 4 nos.
- 3. 250A 4P MCCB Outgoing MCCB : 2 nos.

4. 63A 4P MCCB Outgoing MCCB : 1

ACB should have MP release with O/L, S/C & E/F protection.

MCCBs should have MP Release for O/L & S/C protection

Instruments in ACB outgoing feeder panels:

Each outgoing feeder shall comprise the following instruments in an instruments panel complete with all necessary interconnections, fine wiring and duly tested:

1. LED Indication lamp(ON-Off-Trip-Spring Charge-Trip Ckt Healthy)
2. Digital Multifunction Meter
3. TNC switch for ACB operation

Instruments in MCCB feeder panels:

1. LED Indication (On-Off-trip)
2. Digital Multifunction Meter (CTR:-/5A)

3.2.5 CABLE CHAMBER / CABLE ALLEY

Rear cable alleys with proper cable supports for supporting the cables/ wire shall be provided in between sections of the panel with brought out terminals to drive the cables.

3.3 GENERAL SPECIFICATIONS OF AIR CIRCUIT BREAKERS:3.3.1 TECHNICAL SPECIFICATIONS:

The air circuit breaker shall comply with the following specifications:

- | | | |
|-------|--|---|
| i) | Type | : Indoor, horizontal isolation, horizontal draw out type. |
| ii) | Mounting | : In cassette type enclosure |
| iii) | Insulation Medium | : Air. |
| iv) | Rated operational voltage of circuit Breaker | : 415 V |
| v) | Rated insulation voltage | : 1000 V. |
| vi) | System earthing | : Effectively earthed. |
| vii) | No of poles | : Four. |
| viii) | Rated frequency | : 50Hz |
| ix) | Rated current | : 2000A for incomer & bus-coupler & 1600A for outgoing |
| x) | Rated short time withstand Capacity | : 50 kA for 1 sec at 415 V |
| xi) | Ultimate rated breaking capacity | : 50 kA at 415 V |
| xii) | Spring Charging | : Motorized as well as manual. |
| xiii) | Method of closing | : Through closing coil as well as Manual. |
| xiv) | Closing coil voltage | : 230V AC |
| xv) | Method of tripping: | |
| | a) Shunt trip coil voltage: | 230V AC |
| | b) Manual with mechanical trip button. | |
| xvi) | Mechanical indication: | |
| | a) Breaker ON/OFF | |
| | b) Position SERVICE/TEST/ISOLATED | |

3.3.2 PROTECTION TYPE

The air circuit breaker shall be equipped with Microprocessor based protection release with minimum following features:

- i) Standard Protection with Overload protection, Short circuit protection & Earth fault with adjustable current and time setting.
- ii) MCCBs shall be equipped with Microprocessor based protection release with Overload and short circuit protection.

3.3.3 GENERAL REQUIREMENTS:

- i) The circuit breaker shall conform to latest edition of IS 13947 except where specified otherwise in the specification.
- ii) The circuit breakers shall be with air as insulating medium and shall comprise of four independent poles. Each pole of a breaker shall constitute a separate breaking chamber. These four breaking chambers shall be mounted to a common chassis and connected together for operating by a common operating mechanism.
- iii) Main contact material shall be of copper alloy with silver facing and shall have ample contact area and contact pressure for carrying rated normal / short time currents and shall be adequate to keep temperature rise within limits.
- iv) Working parts of operating mechanism shall be of corrosion resisting materials. Bearings, which require grease, shall be equipped with pressure type grease fittings. Bearings, pins, bolts, nuts etc. shall be adequately pinned or locked to prevent loosening or changing adjustments with repeated operation of the breaker. The outside parts of the breakers and ferrous parts such as hangers, supports, bolts and nuts shall preferably be hot dip galvanized or zinc plated.
- v) The ACBs shall be supplied complete with enclosures as may be necessary. Short circuit performance test shall be conducted on the ACBs along with the enclosures.
- vi) The enclosure shall not be liable to distortion and misalignment.
- vii) The formed and welded steel construction shall be given corrosion resistant treatment following fabrication work. The enclosure / cubicle and doors shall be finished with stove enamel paint.
- viii) The breakers shall have three distinct positions - SERVICE/ TEST/ ISOLATED, within the cubicle and this shall be achieved by suitable racking cam and slide rails system operated from the front of the equipment. Visual indicators shall be provided to show these three positions.
- ix) A STOP shall be provided on the guide rails to prevent accidental falling of the breaker while withdrawing the moving portion.
- x) SAFETY SHUTTER ASSEMBLY shall be provided for shrouding of the main contacts when the breaker is withdrawn. This must operate automatically during insertion and withdrawal of the circuit breakers.

3.3.4 OPERATING MECHANISM:

- i) There shall be provision for manual as well as motorized spring charging. Closing shall be through 230 V AC closing coil. Provision for manually closing the breaker shall also be there. It shall be ensured for each breaker that it closes at the correct speed.
- ii) A direct mechanical coupling shall give indication of ACB #ON# or #OFF#.
- iii) A shunt release shall be provided for electrical tripping of the breaker. Power packs to be provided if necessary.
- iv) Supplier shall ensure correct wiring to facilitate tripping of the breaker.

3.3.5 CONTROL CIRCUIT:

- i) Control wiring shall be done with 1.5 sq. mm PVC insulated and PVC sheathed FRLS Cables with copper conductor wires of 1100V grade. CT wiring shall be done with 2.5 Sqmm PVC insulated and PVC sheathed FRLS Cables with copper conductor wires of 1100V grade.
- ii) Suitable lugs shall be used for termination and all wires shall be numbered with ferrules, as per drawings.

3.3.6 INTERLOCKS:

The following minimum safety interlocks shall be provided –

- i) The breaker cannot be closed in any intermediate position other than three distinct positions #SERVICE/TEST/ISOLATED.
- ii) The front door / cover cannot be opened when the circuit breaker is in closed condition.
- iii) The moving portion of the breaker shall be earthed before the main circuit breaker controls are plugged in the stationary contacts i.e., before the control circuit is completed. Positive earthing of the circuit breaker shall be maintained in the connected position.
- iv) Anti-pumping feature shall be provided for each breaker.
- v) The goods/equipment shall be of best quality and workmanship.

3.4 DOCUMENTS FOR LT PANEL

- 3.4.1 The supplier shall obtain approval for the following drawings & documents. All electrical details shall be submitted to OIL within 15 days from the date of receipt of order.
- 3.4.2 GA drawing showing all details, including constructional detail and component layout for panels
- 3.4.3 Single line Power and Control Circuit diagrams
- 3.4.4 Technical specification of all equipment
- 3.4.5 Bill of materials with catalogues of various components.
- 3.4.6 Type test certificate from reputed test house accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India for Short time current withstand test and temperature rise test of the panel.
- 3.4.7 Four sets of the following documents shall be submitted with the supply
- 3.4.8 Approved GA drawing showing all details.
- 3.4.9 Approved Single line Power and Control Circuit diagrams
- 3.4.10 Technical specification of all equipment
- 3.4.11 Bill of materials with catalogues of various components.
- 3.4.12 Type test certificate from reputed test house accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India for Short time current withstand test (50 kA for 1 sec) and temperature rise test of the panel.
- 3.4.13 Guarantee Certificate
- 3.4.14 List of recommended spares with part nos. for two years.

3.5 TEST AND INSPECTION FOR LT PANEL

- 3.5.1 All routine tests shall be carried out as per relevant IS and IEC.
- 3.5.2 The equipment shall be inspected by engineer(s) of OIL prior to dispatch. Prior intimation at least 15 days in advance to be given to OIL for inspection before dispatch. **All to & fro charges, boarding/ lodging of OIL Engineers shall be borne by OIL. Bidder not to include the same in their quote.** Routine tests in accordance with relevant IS shall be carried out at manufacture's works which shall be witnessed by OIL's engineer(s). The inspection shall include accuracy of dimensions & circuitry as per approved drawings, insulation tests, mechanical & electrical operation tests, primary current injection tests and any other test of the relays as recommended by the manufacturer. All necessary arrangements for the tests shall be made by the supplier at their works during the inspection.
- 3.5.3 Any alteration requirements pointed during the inspection shall be carried out by the manufacturer and confirmed before dispatch, without which dispatch clearance shall not be given.
- 3.5.4 Copies of the test certificates along with bound copies of complete test results shall be submitted for approval of OIL prior to dispatch of the PCC. This shall include complete reports and results of the routine tests as also certified copies of the type tests.

3.6 GUARANTEE FOR LT PANEL:

The supplier shall guarantee the equipment for a period of 18 months from the date of supply or 12 (twelve) months from the date of commissioning, whichever is earlier, against defects arising from faulty design, material and workmanship. Guarantee certificate shall be duly signed and stamped by the supplier and shall be provided along with the dispatch documents.

4.0 INSTALLATION AND COMMISSIONING OF LT PANEL

Installation, Testing & Commissioning of the above 2000A, 433V, TPN, LT Panel

- 4.1.1 Shall be carried out under direct supervision of Specialist engineer of panel manufacturer.
- 4.1.2 Tools and tackle shall be provided by supplier for erection, testing and commissioning.
- 4.1.3 IR value of the panel shall be checked before energizing. Earth resistance value shall also be checked before energizing.
- 4.1.4 Earthing: Earthing of the panel including connection to transformer body earth grid through two nos. stranded single core copper cable of size 16sqmm(minimum) in two separate and distinct position. Panel neutral to be connected to the transformer neutral grid through two nos. stranded single core copper cable of size 16sqmm(minimum) in two separate and distinct position.
- 4.1.5 Loading, unloading, lifting, shifting of panel are in supplier's scope of work. OIL will not provide any assistance in this regard.
- 4.1.6 Supplier shall arrange for electrical power required for erection & commissioning activities of the panel. OIL will not provide any electrical power source.

- 4.1.7 Bidder shall arrange for to & fro travel to the installation site, local conveyance and boarding & lodging during the installation. All charges shall be borne by the bidder and should be quoted accordingly which shall be inclusive of GST and all other taxes including Income Tax/Corporate Tax/ Personal Tax shall be deducted at source.

ANNEXURE – BB

BID REJECTION CRITERIA/ BID EVALUATION CRITERIA

I. BID REJECTION CRITERIA (BRC):

The bids must conform to the specifications, terms and conditions given in the tender document. Bids shall be rejected in case the items offered do not conform to the required minimum/ maximum parameters stipulated in the technical specifications and to the respective international /national standards wherever stipulated.

Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the offer/ offers will be considered as non-responsive and is/are liable to be rejected, if the following conditions are not fulfilled:

(A) TECHNICAL

- 1.0 The bidder shall be an Original Equipment Manufacturer (OEM) of minimum 1 MVA, 6.6 KV Transformer and LT Panel.

OR

The bidder should be the authorized Dealer/Distributor/Sole Selling Agent/Supply House of an Original Equipment Manufacturer (OEM) of minimum 1 MVA, 6.6 KV Transformer and LT Panel.

2.0 IN CASE THE BIDDER IS AN ORIGINAL MANUFACTURER (OEM):

If the bidder is a manufacturer, then they must satisfy the following criteria and furnish the relevant documentary evidences as under along with the technical bid:

- 2.1 The bidder should be a Manufacturer of both Transformer and LT Panel.

- 2.2 The Bidder shall have experience of design, manufacture and supply of -

At least 1 no. of minimum 1 MVA, 6.6 KV Transformer

Or

At least 1 no. of 6.6 KV or 11 KV RMU/HT Switchgear

Or

At least 1 no. of minimum 1 MVA 6.6 KV or 11KV Unitized Substation

And

At least 1(one) set of 415 V PCC Panel / PMCC Panel

to any Central Govt. / State Govt. / PSUs /Public Limited Companies in the last five years preceding the original Bid Closing date.

- 2.3 The following supporting documents with respect to bidder's past supply experience as per para 2.2 must be uploaded/submitted along with the technical bid, failing which the bid shall be considered as incomplete/non-responsive and rejected.

- (i) Copy (ies) of purchase Order(s)/Contract(s) placed on the bidder by client(s).
- (ii) In addition to copies of purchase orders/contracts, any of the following document or combination of documents that substantially confirm(s) successful execution of the order(s).
 - Satisfactory completion certificate/performance report
 - Tax Invoice etc.
 - Consignee receipt delivery challan

Note: For the purpose of above clause, the date of those purchase order(s)/Contract(s) need not be within five (5) years preceding the bid closing date of the tender, but the date of execution must fall within the period of five (5) years prior to the original bid closing date of the tender.

3.0 IN CASE THE BIDDER IS NOT A MANUFACTURER:

If the bidder is a certified authorised dealer/representative of the offered items of any manufacturer (OEM), then the bidder must furnish the following documentary evidences along with their technical bid, failing which the bid shall be rejected:

- 3.1 Dealership certificate/Manufacturer's authorization/Sales partner certification of OEM, who satisfies experience criteria as per clause no. 2.1 above, should be submitted along with the technical bid. This certificate should be valid

at the time of bidding and should remain valid throughout the duration of Purchase Order for execution, including extension, if any.

3.2 The Bidder shall have experience of supply and installation & commissioning of -

At least 1 no. of minimum 1 MVA, 6.6 KV Transformer

Or

At least 1 no. of 6.6 KV or 11 KV RMU/HT Switchgear

Or

At least 1 no. of minimum 1 MVA, 6.6 KV or 11KV Unitized Substation

And

At least 1(one) set of 415 V PCC Panel / PMCC Panel

to any Central Govt. / State Govt. / PSUs /Public Limited Companies in the last five years preceding the original Bid Closing date.

3.3 The following supporting documents with respect to bidder's past supply experience as per para 3.2 must be uploaded/submitted along with the technical bid, failing which the bid shall be considered as incomplete/non-responsive and rejected.

- (iii) Copy (ies) of purchase Order(s)/Contract(s) placed on the bidder by client(s).
- (iv) In addition to copies of purchase orders/contracts, any of the following document or combination of documents that substantially confirm(s) successful execution of the order(s).

- Satisfactory completion certificate/performance report
- Tax Invoice etc.
- Consignee receipt delivery challan

Note: For the purpose of above clause, the date of those purchase order(s)/Contract(s) need not be within five (5) years preceding the bid closing date of the tender, but the date of execution must fall within the period of five (5) years prior to the original bid closing date of the tender.

4.0 Bidder shall quote for all the items of the tender, otherwise the offer shall be rejected.

5.0 One manufacturer can quote only through one supplier.

6.0 One supplier can quote based on an authority letter from one manufacturer only.

7.0 The bid shall be rejected, in case of any change of the manufacturer after submission of bid.

8.0 A job/supply executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting Bid Rejection Criteria/ Bid Evaluation Criteria.

9.0 In absence of requisite documents in support of the above clauses, OIL reserves the right to reject the bid without making any reference to bidders.

10.0 Delivery Period: Delivery of both the transformers and the LT panel to be completed within 3(Three) months from the date of date of issue of Purchase Order/Letter of Award.

Installation & commissioning of both the transformers and the LT Panel to be completed within 1(one) month from the date of site handing over by OIL. 15 days advance intimation shall be given regarding site readiness.

Bidder shall categorically confirm acceptance of the above delivery period and Installation & Commissioning period in their bid.

(B) FINANCIAL:

- 1.0 Annual Financial Turnover of the bidder during any of preceding three financial/accounting years from the original bid closing date should be at least INR 42,95,000.00.
- 1.1 **Net worth** of bidder must be positive for preceding financial/ accounting year.
- 2.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that the balance sheet/Financial Statements for the financial year 2018-2019 has actually not been audited so far.

Notes:

- a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid: -
 - i) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **ANNEXURE EE**.
- OR
- ii) Audited Balance Sheet along with Profit & Loss account.
 - b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

(C) COMMERCIAL

- 1.0 Bids are invited under **SINGLE STAGE TWO BID SYSTEM**. Bidders shall quote accordingly. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid.** The “Unpriced Bid” shall contain all techno-commercial details except the prices, which shall be kept blank. The “Price Bid” must contain the price schedule and the bidder’s commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.
- 2.0 **Bid security of INR 1,71,800.00 shall be furnished as a part of the bid.** Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 8.8 of General Terms & Conditions for National Tenders (National Competitive Bidding), Booklet No. MM/LOCAL/E-01/2005 (For E-tenders). **The Bid Security shall be valid till 30.04.2020.**
- 3.0 Guarantee/Warranty shall be as per Clause no. 1.12 and 3.6 under Annexure – AA. Bidder to confirm the same in their offer.
- 4.0 MSME Bidders are exempted from payment of Bid Security (EMD) irrespective of their product category & capacity, subject to submission of valid MSME registration certificate issued by appropriate authority. Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority.

- 5.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 6.0 **Validity of the bid shall be minimum 120 days from the Original Bid Closing date. Bids with lesser validity will be rejected.**
- 7.0 All the Bids must be Digitally Signed using Class III digital certificate (e-commerce application) with '**Certificate Type: Organisation Certificate**' as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. **The bid signed using other than "Class 3" digital certificate, will be rejected.**
- 8.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Security specified above must be valid for 3(three) months beyond the Warranty period indicated in the Purchase Order/contract agreement [*Please refer General Terms & Conditions for National Tenders (National Competitive Bidding), Booklet No. MM/LOCAL/E-01/2005 (For E-tenders)*]. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.
- 9.0 Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- 10.0 Bids containing incorrect statement will be rejected.
- 11.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.
- 12.0 The following points are deemed as "non-negotiable" and offer shall be rejected straightaway without seeking clarification:
- Validity of bid shorter than validity indicated in the tender.
 - Original Bid Security not received within the stipulated date and time mentioned in the tender.
 - Bid security with (a) Validity shorter than the validity indicated in tender and/or (b) Bid security amount lesser than the amount indicated in the tender.
 - In case the party refuses to sign Integrity Pact.
- 13.0 Bidder must accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:
- Liquidated Damages (*Note: In case of deduction of LD, LD amount will be deducted along with applicable rate of GST*)
 - Guarantee of material
 - Arbitration / Resolution of Dispute
 - Force Majeure
 - Applicable Laws
- 14.0 **DELIVERY LOCATION: The transformer and the Panel are to be delivered, installed and commissioned at the following address -**
- Oil India Limited
Tengakhath Pump Station, ITF,
Tengakhath Complex,
PIN – 786103, Dibrugarh**
- 15.0 **PRICE SCHEDULE:**
- Bidder shall submit the Price Break up as per Annexure DD. Bidders should fill up the annexures, sign and upload under "Notes & Attachments" > "Attachments" only. Evaluation of offers shall be done on F.O.R. Destination basis.**

- 15.1 The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:
1. Basic Material Value
 2. Packing & Forwarding Charges, if any
 3. **Total Ex-Works Value (1+2)**
 4. GST on Total Ex-Works Value
 5. Compensatory Cess, if any
 6. **Total FOR Despatching Station Value (3+4+5)**
 7. Freight Charges upto destination
 8. GST on Freight Charges
 9. Insurance Charges @0.5% of (6) inclusive of GST
 10. Installation & Commissioning Charges
 11. GST on Installation & Commissioning Charges
 12. **Total FOR Destination, Site Value (6+7+8+9+10+11)**
- 15.2 **Comparison of offers shall be done on Total Value vide Srl. No. 12 (Total FOR Destination Value).**
- 15.3 Domestic bidders must quote inland freight charges upto Destination. In case bidder fails to quote inland freight charges, highest freight quoted by domestic bidder (considering pro-rata distance) against this tender or OIL's estimated freight, whichever is higher, shall be loaded to their offer for comparison purpose.
- 15.4 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- 15.5 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for LCB Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC/BRC) mentioned here contradict the Clauses in the General Terms & Conditions of LCB Tender of the tender and/or elsewhere, those mentioned in this BEC/BRC shall prevail.

ANNEXURE - CC

COMMERCIAL COMPLIANCE SHEET

The check list must be completed and submitted with the offer. Please ensure that all these points are covered in the offer. These will ensure that the offer is properly evaluated. Please mark 'Yes', 'No' or 'Not Applicable' or specify against the following questions, in the right hand column.

OFFER REF:			
NAME OF THE BIDDER:			
S/No.	Particulars	Yes/No/Not Applicable	Remarks
1	Whether bid submitted under Single Stage Two Bid System?		
2	Whether ORIGINAL Bid Bond (not copy of Bid Bond) submitted exactly as per format? If YES, provide details -		
	(a) Amount		
	(b) Name of issuing Bank		
	(c) Validity of Bid Bond		
	(d) Whether Bid Bond is valid till		
3	Whether offered firm prices?		
4	Whether quoted offer validity of 120 days from the date of final bid closing of the tender?		
5	Whether quoted delivery period as per tender?		
6	Whether quoted as per tender (without any deviations)?		
7	Whether quoted any deviation?		
8	Whether deviation separately highlighted?		
9	Whether agreed to the Warranty clause?		
10	Whether Price Bid submitted as per Price Schedule		
11	Whether quoted all the items/qty. of tender?		
12	Whether indicated the country of origin for the items quoted?		
13	Whether technical literature / catalogue enclosed?		
14	Whether confirmed acceptance of tender Payment Terms?		
15	Whether indicated the place from where the goods will be dispatched. To specify:		
16	Whether road transportation charges up to Destination quoted?		
17	Whether offered Ex-works price including packing/forwarding charges?		
18	Whether weight & volume of items offered indicated?		
19	If Pre-despatch/shipment inspection charges applicable, whether quoted separately?		
20	Whether confirmed to submit PBG as asked for in tender?		
21	Whether agreed to submit PBG within 30 days of placement of order?		
22	Whether indicated import content in the offer?		
23	Whether all applicable Taxes & Duties have been quoted?		
24	Whether all BRC/BEC clauses accepted?		
25	Whether MSME? If yes, whether documents enclosed as per tender?		
26	Whether submitted Turn Over and Net Worth Certificate?		
27	Whether submitted affidavit/undertaking certifying that the balance sheet/Financial Statements for the financial year 2018-2019 has actually not been audited so far.		
28	Whether undertaking of Authenticity of Documents submitted, if applicable?		

CERTIFICATE OF ANNUAL TURNOVER & NETWORTH

TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETTER HEAD		
<u>TO WHOM IT MAY CONCERN</u>		
<p>This is to certify that the following financial positions extracted from audited financial statements of M/s..... (Name of the bidder) for the last 3 (three) completed accounting years upto.....(as the case may be) are correct.</p>		
YEAR	TURNOVER In INR (Rs.) Crores/ USD Million*	NET WORTH In INR (Rs.) Crores / USD Million*
<p>*Rate of conversion (if used any): USD 1.00 = INR</p> <p>Place:</p> <p>Date:</p> <p>Seal:</p> <p>Membership No.:</p> <p>Registration Code:</p> <p>Signature:</p>		

***Applicable for Global Tenders.**

**FORMAT OF UNDERTAKING BY BIDDERS TOWARDS SUBMISSION
OF AUTHENTIC INFORMATION/DOCUMENTS**

(To be typed on the letter head of the bidder)

Ref. No _____

Date _____

To,

**The Dy. General Manager (Materials)PL
Oil India Limited, Pipeline Headquarters
Narangi, Guwahati**

Sub: Undertaking of authenticity of information/documents submitted

Ref: Your tender No. _____ Dated _____

Sir,

With reference to our quotation no. dated..... against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name :

Designation :

Phone No.

Place :

Date :

(Affix Seal of the Organization here, if applicable)

ANNEXURE – VII (Revised)

BID SECURITY FORMAT

TO,

**OIL INDIA LIMITED
PIPELINE HEADQUARTERS
P. O. – UDAYAN VIHAR,
GUWAHATI - 781171
ASSAM, INDIA**

Whereas (herein after called 'the Bidder') has submitted their Bid No..... dated..... against OIL INDIA LIMITED, PIPELINE HEADQUARTERS, GUWAHATI, ASSAM, INDIA (hereinafter called the Purchaser) 's tender No..... for the supply of (hereinafter called 'the Bid') KNOW ALL MEN by these presents that we..... of having our registered office at (hereinafter called 'the Bank') are bound unto the Purchaser, in the sum offor which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents.

Sealed with the said Bank thisday of

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws their Bid during the period of Bid validity specified by the Bidder,
or
2. If the Bidder, having been notified of the acceptance of their bid by the Purchaser during the period of bid validity:
 - a) fails or refuses to accept the order; or
 - b) fails or refuses to furnish the performance security
 or
3. If the Bidder furnishes fraudulent document/information in their bid.

We undertake to pay to the Purchaser up to the above amount upon receipt of their first written demand (by way of letter /fax/cable) without the Purchaser having to substantiate their demand, provided that in their demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or all of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including _____ (Bidder to indicate specific date as mentioned in the tender), and any demand in respect thereof should reach the Bank not later than the above date.

The details of the issuing bank and controlling bank are as under:

A. Issuing Bank

1. Full address of the bank:
2. Email address of the bankers:
3. Mobile nos. of the contact persons:

B. Controlling Office

1. Address of the controlling office of the BG issuing banks:
2. Name of the contact persons at the controlling office with their mobile nos. and email address:

Signature & Seal of the Bank