Annexure-I

OIL INDIA LIMITED
(A Government of India Enterprise)
P.O. Duliajan-786602, Assam, India
E-mail: material@oilindia.in

INVITATION FOR LOCAL COMPETITIVE BID

OIL INDIA LIMITED invites Local Competitive Bid (LCB) through its e-procurement portal https://etender.srm.oilindia.in/irj/portal for the following items:

E-Tender No	Bid Closing/Opening Date	Item Description
SDI9675P16 Dtd. 19.12.2015 Single Stage Composite Bid	**25.02.2016**	**Video Conference System**
SDI9785P16 Dtd. 05.01.2016 Single Stage Composite Bid	**25.02.2016**	**Defibrilator Monitor**
SDI9427P16 Dtd. 03.12.2015 Single Stage Composite Bid	**25.02.2016**	**Feeder Pillar**
SDI9587P16 Dtd. 12.12.2015 Single Stage Composite Bid	**25.02.2016**	**1000 KVA Transformer**
SDI9425P16 Dtd. 03.12.2015 Single Stage Composite Bid	**25.02.2016**	**Transformer**

Tender fee (Non-refundable): Rs 1,000.00; Bid Closing/Opening Time: **(11 Hrs.) IST/(14 Hrs.) IST**; Period of sale of documents: **Till one week prior to bid closing date**. The complete bid documents and details for purchasing bid documents, participation in E-tenders are available on OIL's e-procurement portal https://etender.srm.oilindia.in/irj/portal as well as OIL's website www.oil-india.com.

NOTE: All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e- portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

OIL INDIA LIMITED
(A Government of India Enterprises)
PO : Duliajan – 786602
Assam (India)

TELEPHONE NO: (91-374) 2808719
FAX NO: (91-374) 2800533
Email: ranjanbarman@oilindia.in ; erp_mm@oilindia.in

FORWARDING LETTER

Tender No. : **SDI9425P16 Dtd. 03.12.2015.**

Tender Fee : **Rs 1,000.00**

Bid Security Amount : **Applicable**

Bidding Type : **SINGLE STAGE COMPOSITE BID SYSTEM**

Bid Closing on : **As mentioned in the e-portal**

Bid Opening on : **-do-**

Performance Security : **Applicable**

Integrity Pact : **Not Applicable**

OIL invites Bids for **Supply, Installation & Commissioning of Transformer (Qty. – 2 Nos.)** through its e-Procurement site under **SINGLE STAGE COMPOSITE BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions.. The details of items tendered can be found in the Item Data and details uploaded under Technical RFX.

The tender will be governed by:

a) **For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP MM Deptt at following: Tel Nos = 0374-2807171 , 0374-2807192. Email id = erp_mm@oilindia.in.**

b) **OIL's office timings are as below:**

	Time (in IST)
Monday – Friday	**07.00 AM to 11.00 AM; 12.30 PM to 03.30 PM**
Saturday	**07.00 AM to 11.00 AM**
Sunday and Holidays	**Closed**

Vendors should contact OIL officials at above timings only.

c) "General Terms & Conditions" for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

d) Technical specifications and Quantity as per **Annexure – 1A**.

e) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents.

f) In the event of receipt of only a single offer against the tender within B.C. date, OIL reserves the right to extend the B.C. date as deemed fit by the Company. During the extended period, the bidders who have already submitted the bids on or before the original B.C. date, shall not be permitted to revise their quotation.

g) All corrigenda, addenda, amendments, time extension, clarifications etc. To the tender will be hoisted on OIL's website (www.oil-india.com) and in the e-portal (https://etenders.srm.oilindia.in/irj/portal) only and no separate notification shall be issued in the press. Prospective bidders are requested to regularly visit the website and e-portal to keep themselves updated.

h) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

i) Bidder are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFx -> External Area - > Tender Documents. The above filled up document to be uploaded in the Technical RFX Response.

Special Note:

1.0 General Qualification Criteria:

In addition to the general BRC/BEC, following criteria on Bidders' Experience and their financial capabilities shall be considered **(Documentary evidence to be provided along with the bid in Technical RFx -> External Area - > Tender Documents)** as on the Bid Closing Date:

Criteria	**Complied / Not Complied.** **Documentary evidence submitted / not submitted**
a) Bidder should have experience of successfully executing similar order of Rs 12.21 Lakhs during last 3 years.	
b) Annual financial turnover of the firm in any of the last 3 financial years or current financial year should not be less than Rs 40.73 Lakhs.	

Note: Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any of the documents in respect of satisfactory execution of each of those Purchase Orders, such as – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of

Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of each of the purchase orders cited above. For Annual financial turnover enclose the audited Annual Reports or balance sheet certified by a chartered accountant.

2.0 Vendors having OIL's User ID & password shall purchase bid documents on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

Vendors who do not have OIL's User ID & password shall obtain User ID & password through online vendor registration system in e-portal and can subsequently purchase bid documents through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

Alternatively application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in favour of M/s Oil India Limited and payable at Duliajan is to be sent to Head-Materials, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted only upto one week prior to the Bid closing date (or as amended in e-portal). The envelope containing the application for participation should clearly indicate "REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO …" for easy identification and timely issue of user ID and password. On receipt of requisite tender fee, USER_ID and initial PASSWORD will be communicated to the bidder (through e-mail) and will be allowed to participate in the tender through OIL's e- Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL's web site www.oil-india.com.

NOTE:
PSUs and MSE units are provided tender documents Free of Cost (as per govt guidelines), however they have to apply to OIL's designated office to issue the tender documents one week prior to the Bid closing date (or as amended in e-portal).

3.0 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 **Head Materials, Materials Department, Oil India Limited, Duliajan - 786602, Assam** on or before the Bid Closing Date and Time mentioned in the Tender.

a) **Original Bid Security**
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.

4.0 Benefits to Micro & Small Enterprises (MSEs) as per prevailing Govt guidelines as applicable on B.C date shall be given. MSEs who are interested in availing the benefits will upload with their offer proof of their being MSE registered for the item tendered. The MSE are also required to upload scanned copies of relevant documents indicating details of registration alongwith validity, name of the registering organization and details of the item, ownership etc,. failing which, their offer may not be liable for consideration of benefits to MSEs.

5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not

substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.

7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.

8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/LOCAL/E-01/2005 for E-procurement (LCB Tenders) elsewhere, those in the BEC / BRC shall prevail.

9.0 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 will be summarily rejected.

10.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.

11.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

Yours Faithfully

Sd-
(R. BARMAN)
SR. MANAGER MATERIALS (IP)
FOR HEAD-MATERIALS

Annexure - CCC

Tender No & Date: SDI9425P16 Dtd. 03.12.2015

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the "Bid Rejection Criteria" as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

Criteria	Complied / Not Complied. (Remarks if any)
1.0 BID REJECTION CRITERIA (BRC): The bid shall conform generally to the specifications, terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. **A) COMMERCIAL:** i) Validity of the bid shall be minimum 120 days from the Bid Closing Date. ii) Bid security: The bid must be accompanied by Bid Security of **Rs 40,000.00** in OIL's prescribed format as Bank Guarantee or a Bank Draft/Cashier cheque in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 10 months from Bid closing date. (i.e. upto 25.12.2016).** **Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.** **If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration.** For exemption for submission of Bid Security, please refer Clause No. 8.8 of	

General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VII (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

In case of extension of Bid Closing date against the tender where a bidder has already submitted his bid with requisite bid security validity within the original B.C. Date, such bidders will extend validity of bid security covering the extended period of the bid closing date.

iii) Performance Security:

The successful Bidder will have to provide Performance Security @ 10% of order value. The Performance Security must be valid for one year from the date of successful commissioning of the equipment or 18 months from the date of despatch whichever is earlier

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

iv) *The Bank Guarantee should be allowed to be encashed at all branches within India*.

v) 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.

vi) 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.

vii) All the Bids must be Digitally Signed using "Class 3" digital certificate with Organisation's name *(e-commerce application)* 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.

viii) Price should be maintained in the "online price schedule" only. The price submitted other than the "online price schedule" shall not be considered.

ix). A bid shall be rejected straightway if it does not conform to any one of the following clauses:

(a) Validity of bid shorter than the validity indicated in the Tender. **(b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.** **(c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.** **(e) Average Annual Turnover of a bidder lower than the average Annual turnover mentioned in the Tender.** **2.0 <u>BID EVALUATION CRITERIA (BEC)</u>** The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below. **A) TECHNICAL:** 1.0 The bids will be evaluated as per NIT Specifications. **B) COMMERCIAL:** i). To evaluate the inter-se-ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Govt. of Assam guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their offer. ii). 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 will be summarily rejected.	

NOTE:

<u>Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.</u>

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI9425P16 Dtd. 03.12.2015

	Complied / Not Complied. (Remarks if any)
ITEM NO. 10, 500 KVA DRY TYPE TRANSFORMER, (QTY. – 1 NO.) 1.SCOPE This specification covers supply, testing and commissioning of 500kVA 11kv/3.3 kv Dry Type Transformer. 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. 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 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 cold rolled grain oriented silicon steel. Both low & high voltage windings shall be made of copper conductor. The class of winding insulation 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 enclosure. The enclosure shall be fabricated with mild steel CRCA sheets with adequate provision for ventilation. The enclosures shall undergo the nine tank process. Finally the external and internal surfaces of the enclosure shall be powder coated with the required paint shade. 4.GENERAL REQUIREMENTS: 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. 4.2 Capacity and Rating: Continuous rating specified shall be irrespective of tapping position. Indoor transformers shall be suitable for IP-23 protection. 4.3 Temperature Rise: The reference ambient temperatures assumed for the purpose of this specification are as follows - (a) Maximum ambient air temperature 50 degree C. (b) Maximum daily average ambient air temperature 40 degree C. (c) Maximum yearly weighted average ambient temperature 32 degree C. (d) Minimum yearly weighted average ambient temperature (-) 5 degree C. (e) Class of insulation F (f) The temperature rise limit at the above conditions and at the altitude not exceeding 1000	

meters shall be as specified. If the site conditions indicated for a particular job is more severe than the referred ambient temperature mentioned above, the temperature rise above ambient shall be suitably scaled down such that the hot spot temperature shall not exceed the values for the reference conditions 90 degree C (F class insulation).

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

Additionally sufficient cooling fans shall be provided which will start automatically when the temperature exceeds 75-90 degree. (The temp shall be adjustable with a thermostat.)

4.5 Tap Changing Device: Preferred tapping range is +5% to -7.5% 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.

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

4.7 Voltage Ratio: Unless otherwise specified, the transformer shall be suitable for a voltage ratio of 11 KV/3300 Volts

4.8 Vector Group: In case of step down transformers, the winding connections shall conform to vector group Dyn11 unless otherwise specified.

4.9 Accessories: The transformer shall be with enclosure or without 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.

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

(a) Off load type tap changing link or tap switch.
(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) Earth terminals (2 Nos.) for body earthing
(h) Operating spares-1 set
(i) HT Bushings-3 Nos
(f) LT Bushing- 4Nos

5.0) Electrical Parameters of Dry type, natural air/force cooled distribution transformer:

5.01) Rating : 500 KVA.
5.02) Rated HV voltage: 11 kV,3 Phase
5.03) Rated LV voltage: 3300 volts, 3 Phase .
5.04) No. of phase: 3 phase
5.05) Connection (HV) : Delta
5.06) Connection (LV) : Star
5.07) Vector Group : Dyn l1
5.08) Installation : Indoor type.
5.09) Material of winding: Double wound type Copper(99.99%)
5.010) Max. Current density in HV & LV winding: 2.6 A / mm2
5.011) Method of system earthing: Neutral Solidly earthed system
5.012) Auxiliary power supply: 230V AC
5.013) Control Voltage : 230V AC
5.014) Frequency: 50 ± 3 %
5.015) Percentage impedance: 5.0%. Tolerance as per IS-2026.
5.016) Nominal HT system voltage: 11kV
5.017) Service duty: Continuous.

5.1. SITE CONDITION:
a).
i) Maximum Ambient air temperature : 40ºC
ii) Minimum Ambient air temperature : 6.0ºC
b). Maximum humidity at site (at 40 º C) : 98 %
c). Surrounding atmospheric condition : Humid
d). Site Altitude: 120 mtrs.
e). Seismic design co-efficient : As per IS: 1893.
f). Rainfall : 200 cm (annually.)

5.2.RATING AND GENERAL DATA:

a). Type of Insulation: Class-F. Temp. Rise-Designed to withstand 120 degree º C
b). Partial discharge: As per IS-11171, IS-6209.
c). Type of cooling: AN or force cooling
d). Installation: Indoor
e). Type of neutral earthing: Solidly grounded Neutral.
f). Symmetrical short circuit withstands capacity: As per IS-11171.
g). Rated short duration power frequency withstands voltage: As per IS 11171.
h). 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 95KV.
i). Transformer sound level should not exceed 60 db.
j). Water absorption (24hrs @25C): less than 0.05% (superior insulation, longer life)
k).Chemical Resistance: Painting must have excellent performance rating.
l). Dielectric Strength: Minimum of 3200 volts/mil dry (for superior stress, Over voltage tolerance)
m). Dissipation Factor: Max. 0.02 @25 degree C to reduce aging of insulation.
n) Shall have high impulse voltage withstand, as the transformer switching by the vacuum circuit breaker.

5.3. TAP CHANGER:
Type: Off-Circuit Tap Links
Total tapping range: ± 5.0 %
Tapping steps: In steps of 2.5 %.
Markings shall be clear enough to indicate the tap position.

5.4. TERMINAL ARRAGEMENT:
HV winding line end: Cable box
LV winding line end : Cable box
Both the terminal/cable boxes shall opossite side of the transformer and cable entry to the terminal/cable boxes shall be button entry.
One neutral bushing outside the cable box shall be provided for grounding.

5.5. BUSHING:
Made from non-hygroscopic epoxy resin cast material suitable for site condition mention in Para- B & conforming to IS-2099

5.6. CABLE BOX:
i) HV cable box should be suitable for termination of 1 nos. 3 Cx120 sq. mm XLPE armoured, Aluminum conductor cable with heat shrink type cable termination. The bottom plate shall be

detachable type and 1 nos. heavy duty single compression cable glands suitable for 3Cx120 sqmm XLPE armoured cables shall be fitted. Cable Box standard should be as per IP-54.
ii) LV cable box should have brought out electro-tinned copper bus bars of suitable rating & size for termination of 3 nos. of 3C x 240 sq. mm PVC/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. Cable Box standard should be as per IP-54.
iii) HT and LT cable boxes shall be button entry type and Bottom detachable gland plates made from 3.0mm thick MSCR sheet shall be provided for all cable entries, suitable cable gland shall be provided for the above cables.
iii) Terminals should be marked as per IS: 2026 -1977.

5.7. 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 are branded by means of resin glass tape to reduce vibration & noise.

5.8. 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 fiber 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.

5.9. 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.

5.10. 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 Gounding of neutral externally.

5.11. WIRING

All internal wiring shall be done with 1.1kv grade fire retardant 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.

5.12. 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)Tape 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 purchase order no. and date.

5.13. LIFTING HOOK.

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

5.14. LIST OF FITTNGS AND ACCESSORIES:

i. HV bushings inside HV cable box: 3 nos. rated for 11kV.
ii. LV bushings in side LV cable box : 3 nos.(3P+rated 3300 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.

6. Make: Siemens,Kirloskar, ABB,Voltamp, Raychem RPG, PETTE, Crompton Greaves,

7. INSPECTION.
(i) All the NIT specified routine tests and special tests as per IS: 11171 are to be carried out in presence of OIL's Engineer at manufacturer's works. The supplier will give intimation to OIL 15 days advance prior to commencement of tests so that OIL can depute representative for witnessing tests in time.
(ii) The dispatch will be cleared only if the test results comply with the specifications and testing results are within the tolerance limits.
(iii) 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.

9. TEST
I. TYPE TEST
The transformer shall be type tested and following CPRI or any government approved laboratory type test certificates on similar transformer of specified rating should be furnished along with the offer. These type test certificates should not be more than 5 (five) years old on the date of 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.
II. 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

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 dispatch of the materials.
ii. Party should get the detail transformer drawings approved from OIL prior to manufacturing of the transformer.
iii. The bidder should submit with their offer the list of customers to whom the bidder has supplied transformers of similar rating & type (as per NIT) during last five years.

iv. Bidder's shall submit the list of manufacturer's authorized dealers of eastern region along with the offer. v. Bidder's shall fill up the technical data sheet as per format attached. 11. TECHNICAL PARTICULARS The following Technical Particulars to be furnished by the party 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) 25: 25. Sound level:	
ITEM NO. 20, TESTING AND COMMISSIONING (QTY. – 1 AU) i. The bidder shall test and commission the transformer within 30 days after getting the Commissioning call from OIL. ii. Testing & Commissioning of 500kVA, 11kV/3300 Volts transformer Shall be carried out by specialist /engineer from manufacturer iii. 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 energisation of the transformer.	
ITEM NO. 30, 200KVA DRY TYPE TRANSFORMER (QTY. – 1 NO.) 1.SCOPE This specification covers supply, testing and commissioning of 200kVA, 3300volts/415volts Dry Type Transformer. 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. 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

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 cold rolled grain oriented silicon steel. Both low & high voltage windings shall be made of copper conductor. The class of winding insulation 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 enclosure.
The enclosure shall be fabricated with mild steel CRCA sheets with adequate provision for ventilation. The enclosures shall undergo the nine tank process. Finally the external and internal surfaces of the enclosure shall be powder coated with the required paint shade.

4.GENERAL REQUIREMENTS:
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.
4.2 Capacity and Rating: Continuous rating specified shall be irrespective of tapping position. Indoor transformers shall be suitable for IP-23 protection.
4.3 Temperature Rise: The reference ambient temperatures assumed for the purpose of this specification are as follows -
(a) Maximum ambient air temperature 50 degree C.
(b) Maximum daily average ambient air temperature 40 degree C.
(c) Maximum yearly weighted average ambient temperature 32 degree C.
(d) Minimum yearly weighted average ambient temperature (-) 5 degree C.
(e) Class of insulation F
(f) The temperature rise limit at the above conditions and at the altitude not exceeding 1000 meters shall be as specified. If the site conditions indicated for a particular job is more severe than the referred ambient temperature mentioned above, the temperature rise above ambient shall be suitably scaled down such that the hot spot temperature shall not exceed the values for the reference conditions 90 degree C (F class insulation).
4.4 Cooling: Unless otherwise specified the transformer cooling shall be air and naturally cooled (AN).
Additionally sufficient cooling fans shall be provided which will start automatically when the temperature exceeds 75-90 degree. (The temp shall be adjustable with a thermostat.)
4.5 Tap Changing Device: Preferred tapping range is +5% to -7.5% 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.
4.6 Terminal Markings Connections: Relevant provisions of IS: 2026 (Part-IV)-1977 shall be applicable.
4.7 Voltage Ratio: Unless otherwise specified, the transformer shall be suitable for a voltage ratio of 11 KV/415 V
4.8 Vector Group: In case of step down transformers, the winding connections shall conform to vector group Dyn11 unless otherwise specified.
4.9 Accessories: The transformer shall be with enclosure or without 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.
4.10 Fittings: The transformer shall be complete with the following fittings: -
(a) Off load type tap changing link or tap switch.
(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) Earth terminals (2 Nos.) for body earthing
(h) Operating spares-1 set
(i) HT Bushings-3 Nos
(f) LT Bushing- 4Nos

5.0) Electrical Parameters of Dry type, natural air/force cooled distribution transformer:

5.01) Rating : 200 KVA.
5.02) Rated HV voltage: 3.3 kV,3 Phase
5.03) Rated LV voltage: 415 volts, 3 Phase and neutral. 415 volts (phase phase to phase) and 240 Volts(phase to neutral)
5.04) No. of phase: 3 phase
5.05) Connection (HV) : Delta
5.06) Connection (LV) : Star
5.07) Vector Group : Dyn l1
5.08) Installation : Indoor type.
5.09) Material of winding: Double wound type Copper(99.99%)
5.010) Max. Current density in HV & LV winding: 2.6 A / mm2
5.011) Method of system earthing: Neutral Solidly earthed system
5.012) Auxiliary power supply: 230V AC
5.013) Control Voltage : 230V AC
5.014) Frequency: 50 ± 3 %
5.015) Percentage impedance: 5.0%. Tolerance as per IS-2026.
5.016) Nominal HT system voltage: 11kV
5.017) Service duty: Continuous.

5.1. SITE CONDITION:
a).
i) Maximum Ambient air temperature : 40ºC
ii) Minimum Ambient air temperature : 6.0ºC
b). Maximum humidity at site (at 40 º C) : 98 %
c). Surrounding atmospheric condition : Humid
d). Site Altitude: 120 mtrs.
e). Seismic design co-efficient : As per IS: 1893.
f). Rainfall : 200 cm (annually.)

5.2.RATING AND GENERAL DATA:
a). Type of Insulation: Class-F. Temp. Rise-Designed to withstand 120 degree º C
b). Partial discharge: As per IS-11171, IS-6209.
c). Type of cooling: AN or force cooling
d). Installation: Indoor
e). Type of neutral earthing: Solidly grounded Neutral.
f). Symmetrical short circuit withstands capacity: As per IS-11171.

g). Rated short duration power frequency withstands voltage: As per IS 11171.
h). 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 95KV.
i). Transformer sound level should not exceed 60 db.
j). Water absorption (24hrs @25C): less than 0.05% (superior insulation, longer life)
k).Chemical Resistance: Painting must have excellent performance rating.
l). Dielectric Strength: Minimum of 3200 volts/mil dry (for superior stress, Over voltage tolerance)
m). Dissipation Factor: Max. 0.02 @25 degree C to reduce aging of insulation.
n) Shall have high impulse voltage withstand, as the transformer switching by the vacuum circuit breaker.

5.3. TAP CHANGER:
Type: Off-Circuit Tap Links
Total tapping range: ± 5.0 %
Tapping steps: In steps of 2.5 %.
Markings shall be clear enough to indicate the tap position.

5.4. TERMINAL ARRAGEMENT:
HV winding line end: Cable box
LV winding line end : Cable box
Both the terminal/cable boxes shall opposite side of the transformer and cable entry to the terminal/cable boxes shall be button entry.
One neutral bushing outside the cable box shall be provided for grounding.

5.5. BUSHING:
Made from non-hygroscopic epoxy resin cast material suitable for site condition mention in Para- B & conforming to IS-2099

5.6. CABLE BOX:
i) HV cable box should be suitable for termination of 1 nos 3 Cx120 sq. mm XLPE armoured, Aluminum conductor cable with heat shrink type cable termination. The bottom plate shall be detachable type and 1 nos. heavy duty single compression cable glands suitable for 3Cx120 sqmm XLPE armoured cables shall be fitted. Cable Box standard should be as per IP-54.
ii) LV cable box should have brought out electro-tinned copper bus bars of suitable rating & size for termination of 2 nos. of 4C x 240 sq. mm PVC/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. Cable Box standard should be as per IP-54.
iii) HT and LT cable boxes shall be button entry type and Bottom detachable gland plates made from 3.0mm thick MSCR sheet shall be provided for all cable entries, suitable cable gland shall be provided for the above cables.
iii) Terminals should be marked as per IS: 2026 -1977.

5.7. 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 are branded by means of resin glass tape to reduce vibration & noise.

5.8. 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 fiber 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.

5.9. 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.

5.10. 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.

5.11. WIRING

All internal wiring shall be done with 1.1kv grade fire retardant 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.

5.12. 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)Tape 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 purchase order no. and date.

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

5.14. LIST OF FITTNGS AND ACCESSORIES:
i. HV bushings inside HV cable box: 3 nos. rated for 3.3kV.
ii. LV bushings in side LV cable box : 4 nos.(3P+1N) rated 415 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.

6. Make: Siemens,Kirloskar, ABB,Voltamp, Raychem RPG, PETTE, Crompton Greaves,

7. INSPECTION.
(i) All the NIT specified routine tests and special tests as per IS: 11171 are to be carried out in presence of OIL's Engineer at manufacturer's works. The supplier will give intimation to OIL 15 days advance prior to commencement of tests so that OIL can depute representative for witnessing tests in time.
(ii) The dispatch will be cleared only if the test results comply with the specifications and testing results are within the tolerance limits.
(iii) 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.

9. TEST

I. TYPE TEST

The transformer shall be type tested and following CPRI or any government approved laboratory type test certificates on similar transformer of specified rating should be furnished along with the offer. These type test certificates should not be more than 5 (five) years old on the date of 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.

II. 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

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 dispatch of the materials.
ii. Party should get the detail transformer drawings approved from OIL prior to manufacturing of the transformer.
iii. The bidder should submit with their offer the list of customers to whom the bidder has supplied transformers of similar rating & type (as per NIT) during last five years.
iv. Bidder's shall submit the list of manufacturer's authorized dealers of eastern region along with the offer.
v. Bidder's shall fill up the technical data sheet as per format attached.

11. TECHNICAL PARTICULARS

The following Technical Particulars to be furnished by the party 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) 25: 25. Sound level:	
ITEM NO. 40, TESTING AND COMMISSIONING, (QTY. – 1AU) i. The bidder shall test and commission the transformer within 30 days after getting the Commissioning call from OIL. ii. Testing & Commissioning of 200kVA, 3.3kV/415V transformer Shall be carried out by specialist /engineer from manufacturer iii. 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 energisation of the transformer.	
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. Offer shall be complete in all respect to meet the technical specifications and general notes of the NIT. VII. Bidder, offering as an authorised dealer/offering on behalf of OEM, shall submit copy of valid dealership certificate/authorisation letter from the OEM along with the offer. VIII. The bidder should have successfully completed supply, installation and commissioning of minimum 1 nos, 11 KV, 500KVA / 3.3 KV, 200KVA or higher rated transformer in any central Govt. /Govt. PSU/Public Limited Companies during the last 5 years. Performance certificates from user in this effect and the details of the job carried out shall be enclosed with the offer. IX. OEM of the Transformer shall have the testing facilities to carry out the type test and routine tests of the transformer as per BIS in their manufacturing works and shall confirm the availability of the testing facility in the offer. Documentary evidence to this effect also shall be enclosed with the offer. X. The copy of the type test certificates carried out on a 11 KV, 500KVA / 3.3 KV, 200KVA dry type transformer should be furnished along with the offer XI. Bidder should mention the no load losses, load losses & efficiency at 50% & 75% load (0.8 pf) on transformer with the offer XII.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 test to be carried out at their premises. XIII. Partial discharge type test is to be carried out on transformer. Party should also confirm about the test in their offer	

NOTE:

1. Quotation alongwith test certificates, technical catalogues / literatures shall be submitted for technical evaluation.
2. Material shall be guaranteed for minimum one year period from the date of commissioning or 18 months from date of supply of the material. Duly stamped Guarantee certificate should be supplied along with the material.
3. The bidder shall be manufacturer or authorized dealer of manufacturer of Dry Type Transformer. In case of authorized dealer, valid dealership/authorization certificate must be submit along with bid
4. The bidder must quote for both (a) supply, commissioning of new 500kVA / 200KVA dry type transformer.
5. Both the bidders will be procured from the same source and evaluation will be done accordingly.

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

Technical Bid Checklist **Annexure-EEE**

Tender No.	
Bidder's Name :	

		Compliance by Bidder	
SL. NO.	**BEC / TENDER REQUIREMENTS**	Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	**Bidder to confirm that he has not taken any exception/deviations to the bid document .**		
2	**Confirm that the product offered strictly conform to the technical specifications.**		
3	**Confirm that the Offer has been made with Bid Bond / Bank Guarantee / Earnest Money along with the offer (Wherever Applicable) ?**		
4	**Confirm unconditional validity of the bid for 120 days from the date of opening of techno-commercial bid.**		
5	**Confirm that the prices offered are firm and / or without any qualifications?**		
6	**Confirm that all relevant fields in the on-line bidding format have been filled in by the bidder for the items quoted by them.**		
7	**Confirm that the the price bid is in conformity with OIL's online bidding format ?**		
8	**Confirm that the Bid comply with all the terms & conditions ?**		
9	**Confirm that the offers and all attached documents are digitally signed using digital signatures issued by an acceptable Certifying Authority (CA) as per Indian IT Act 2000.**		
10	**CONFIRM THAT YOU HAVE SUBMITTED THE DULY SIGNED INTEGRITY PACT DOCUMENT (Wherever Applicable)**		
11	**CONFIRM THAT YOU SHALL SUBMIT PERFORMANCE BANK GUARANTEE AS PER NIT IN THE EVENT OF PLACEMENT OF ORDER ON YOU (Wherever Applicable)**		
12	**CONFIRM THAT YOU HAVE SUBMITTED DOCUMENTS AS PER GENERAL QUALIFICATION CRITERIA**		
13	**Confirm that you have submitted Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager where Bid security has been submitted as Bank Guarantee.**		

NOTE: Please fill up the greyed cells only.

Response Sheet **Annexure-FFF**

Tender No.	
Bidders Name	

Bidders Response Sheet

Sl No.	Description	Remarks
1	Name of Bidder	
2	Whether tender document purchased from OIL's offices.	
3	Place of Despatch	
4	Whether Freight charges have been included in your quoted prices	
5	Whether Insurance charges have been included in your quoted prices	
6	Make of quoted Product	
7	Offered Validity of Bid as per NIT	
8	Delivery Period in weeks from placement of order	
9	Complied to Payment terms of NIT (if applicable) otherwise to Standard Payment Terms of OIL or not.	
10	Bid Security Submitted (if applicable)	
11	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
12	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager	
13	Bid Security if Not submitted reasons thereof	
14	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
15	Integrity Pact Submitted (if applicable)	
16	Whether submitted documents in support of General Qualification criteria of NIT	
17	If bidder is Small scale unit whether you have quoted your own product	
18	If bidder is Small scale unit whether you are eligible for purchase preference (as per Govt guideliness)	
19	Whether filled up the bank details for online payment as per Annexure GGG	

NOTE: Please fill up the greyed cells only.

ANNEXURE - GGG

(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETER HEAD)
(ALL FIELDS ARE MANDATORY)

Tender No.	**:……**
Name of Beneficiary	**:M/s.……**
Vendor Code	**:……...**
Address	**:...…….**
	...……...
Phone No. (Land Line)	**:...…….**
Mobile No.	**:...…….**
E-mail address	**:...…….**
Bank Account No. (Minimum	
Eleven Digit No.)	**:...…….**
Bank Name	**:...…….**
Branch	**:...…….**
Complete Address of your	**:...…….**
Bank	**:...…….**

IFSC Code of your Bank

a) RTGS	**:……...**
b) NEFT	**:……...**
PAN	**:……...**
VAT Registration No.	**:……...**
CST Registration No.	**:……...**
Service Tax Registration No.	**:……...**
Provident Fund Registration	**:……...**

I/We confirm and agree that all payments due to me/us from Oil India Limited can be remitted to our above mentioned account directly and we shall not hold Oil India Limited responsible if the amount due from Oil India Limited is remitted to wrong account due to incorrect details furnished by us.

……
Office Seal **Signature of Vendor**

Counter Signed by Banker:
Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

1) **PAN Card**
2) **VAT Registration Certificate**
3) **Service Tax Registration**
4) **CST Registration**
5) **Provident Registration Certificate**
6) **Cancelled cheque of the bank account mentioned above (in original).**
7) **Bank Statement not older than 15 days on the date of submission.**