



OIL INDIA LIMITED
(A Government of India Enterprise)
P.O. Duliajan - 786602, Assam, India
FAX: 91-0374-2800533; E-mail : material@oilindia.in

Annexure-I

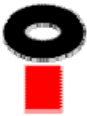
A) OIL INDIA LIMITED invites Indigenous Competitive Bid (e-tenders) through its e-Procurement portal : <https://etender.srm.oilindia.in/iri/portal> for following e-tender :

E-Tender No.	B.C Date	Material Description & Quantity
SDI5263P15 DT: 04.11.2014 (SINGLE STAGE COMPOSITE BID SYSTEM)	08.01.2015	SUPPLY OF PRESSURE CALIBRATOR/SOLDERING IRON STATION/PRECISION - STANDARD GAUGE
SDISDI5363P15 DT: 12.11.2014 (SINGLE STAGE COMPOSITE BID SYSTEM)	08.01.2015	TRANSFORMER – 3 NOS
SDI5364P15 DT: 12.11.2014 (SINGLE STAGE COMPOSITE BID SYSTEM)	08.01.2015	LT PANEL – 01 NOS
SDI5362P15 DT:12.11.2014 (SINGLE STAGE TWO BID SYSTEM)	08.01.2015	11 KV VCB PANEL – 05 NOS

Application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 (Excepting PSUs and SSI units registered with NSIC) 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 one week prior to Bid Closing date. 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:

(Tender Fee may also be paid online upto one week prior to the bid closing date (or as amended in e-portal).



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. : SDI5363P15 DT: 12.11.2014

Tender Fee : Rs 1,000.00

Bid Security Amount : Rs 48,000.00

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 and Commissioning of 03 Nos Transformer at OIL, MORAN** 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) “General Terms & Conditions” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.
- b) Technical specifications and Quantity as per **Annexure – 1A**.
- c) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents.
- d) 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.
- e) 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).

- f) 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:

a) Bidder should have experience of successfully supply, installation and commissioning of Dry Type Transformer of Rs 14.34 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 47.80 Lakhs.

2.0 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 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:

a) Tender Fee may also be paid online upto one week prior to the bid closing date (or as amended in e-portal).

b) PSUs and SSI 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 before the last date of sale of tender document mentioned in the tender.

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 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.

5.0 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.

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

7.0 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.

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

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 (ID)
FOR : HEAD-MATERIALS**

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.

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
<p>1.0 BID REJECTION CRITERIA (BRC):</p> <p>The bids must conform to the specifications and terms & conditions given in the Bidding Documents. Bids shall be rejected in case the item(s) offered do not conform to the required parameters stipulated in the technical specifications and to the respective national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms & conditions, the following requirements shall have to be particularly met by the bidders without which the offer will be considered as non-responsive and rejected.</p> <p><u>A) COMMERCIAL:</u></p> <p>i). Bid security: The bid must be accompanied by Bid Security of Rs 48,000.00 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 08.11.2015-).</p> <p>Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.</p> <p><u>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.</u></p> <p>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</p>	

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.

ii) Performance Bank Guarantee

Successful bidder will be required to furnish a Performance Security @10% of the order value.

For exemption for submission of Performance Security, please refer Clause No. 9.12 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. The Performance Bank Guarantee for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning or 18 months from the date of despatch whichever concludes earlier. However, for consumable like chemicals, cement, tubular etc. the Performance Bank Guarantee shall be valid for 12 months from the date of dispatch.

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

iv) Validity of the bid shall be minimum 120 days from the Bid Closing Date.

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.

vii) Price should be maintained in the “online price schedule” only. The price submitted other than the “online price schedule” shall not be considered.

2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the technical specifications, 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. Offer shall be complete in all respect to meet the technical specifications and general notes of the NIT.

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.

NOTE:

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

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ANNEXURE-IA
TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI5363P15 DT: 12.11.2014

	Complied / Not Complied. (Remarks if any)
<p><u>ITEM NO. 10</u></p> <p><u>50KVA, 11KV/400 VOLTS, 3 PHASE, 50 HZ, DOUBLE WINDING, COPPER CONDUCTOR, DRY TYPE, NATURAL AIR COOLED TRANSFORMERS FOR INDOOR INSTALLATION – QTY = 2 NOS</u></p> <p>TECHNICAL SPECIFICATIONS OF TRANSFORMERS:</p> <p>250kVA, 11kV/400 Volts, 3 Phase, 50 Hz, double winding, copper conductor, Dry type, natural air cooled Transformers for indoor installation & as per following specifications:</p> <p>A. GENERAL:</p> <p>1. Applicable Indian Standard : IS - 11171 and IS - 2026 with latest amendments.</p> <p>2. Service duty : Continuous.</p> <p>3. Installation : Indoor.</p> <p>4. Auxiliary power supply : 230V AC \pm 10 %</p> <p>5. Control Voltage : 230V AC \pm 10 %</p> <p>B. SITE CONDITION:</p> <p>1. a) Maximum Ambient air temperature : 45°C</p> <p>b) Minimum Ambient air temperature : 6°C</p> <p>2. Maximum humidity at site (at 40 ° C) : 98 %</p> <p>3. Surrounding atmospheric condition : Humid</p> <p>4. Site altitude : 120 mtrs.</p> <p>5. Seismic design co-efficient : As per IS: 1893.</p> <p>6. Rainfall : 200 cm (annually.)</p> <p>C. RATING AND GENERAL DATA:</p> <p>1. Rating : 250 kVA</p> <p>2. No. of phases : 3</p> <p>3. Frequency : 50 Hz \pm 3 %</p> <p>4. Type of Insulation : Class-F. Temp. rise-90 ° C</p> <p>5. Partial discharge : As per IS-11171, IS-6209.</p> <p>6. Type of cooling : AN</p> <p>7. Installation : Indoor</p> <p>8. Vector group : DYn 11</p> <p>9. Percentage impedance : 4.5%. Tolerance as per IS-2026.</p> <p>10. Nominal system voltage : 11kV/ 400 Volts</p> <p>11. Type of neutral earthing : Solidly grounded Neutral.</p> <p>12. Symmetrical short circuit withstands capacity : As per IS-11171.</p> <p>13. Rated short duration power frequency withstands voltage: As per IS 11171.</p> <p>14. Rated lightning impulses withstand voltage: As per IS 11171 (List-2). As Vacuum</p>	

circuit breaker will be used as incomer to the Transformers, BIL voltage shall be 75KV.

15. Transformers sound level should not exceed 55 db.

16. Chemical Resistance: Painting must have excellent performance rating.

17. Dielectric Strength: Minimum of 3200 volts/mil dry (for superior stress, Over voltage tolerance)

18. Dissipation Factor: Max. 0.02 @25 degree C, To reduce aging of insulation.

19. 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.

20. 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.

21. BUSHING:

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

22. CABLE BOX:

a) HV cable box should be suitable for termination of 1 no. 3 Core x 240 sq. mm XLPE armoured, aluminium conductor cable with heat shrink type cable termination. The bottom plate shall be detachable type and one no. heavy duty single compression cable gland suitable for said XLPE armoured cable shall be fitted. Cable Box should have protection as per IP-54.

b) LV cable box should have brought out electro-tinned copper bus bars of suitable rating & size for termination of 2 nos. of $3\frac{1}{2}$ core x 400 sq. mm XLPE Aluminium cable. 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 have protection as per IP-54.

c) Terminals should be marked as per IS: 2026 -1977.

23. TRANSFORMERS CORE:

a) Material : High grade cold rolled grain oriented silicon steel.

b) Structure : Grounded and sharp corners avoided.

c) Lamination : Treated and coated with suitable insulations. The core limbs & yokes are banded by means of resin glass tape to reduce vibration & noise.

24. TRANSFORMERS WINDING:

The winding material should be high conductivity 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 Transformers case shall be of vibration resistance pad placed uniformly in all direction.

(i) The windings/connection of Transformers 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 equalise 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.

25. ENCLOSURE:

Enclosure for Transformers 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 Transformers shall be grounded.

26. Name plate:

Transformers 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) OIL's P.O. no. and date.

27. Lifting hook.

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

28. LIST OF FITTINGS AND ACCESSORIES:

- a. HV bushings inside HV cable box: 3 nos. rated for 11kV.
- b. LV bushings in side LV cable box: 4 nos.(3P+1N) rated 440 Volts
- c. Outside LV cable box: 1 no. for grounding.

- d. Digital Winding temperature scanner with PT100 sensor connected with six nos. RTDs, two 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. 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.
- e. Earthing terminals - 2 nos for body earthing.
- f. Jacking lugs.
- g. Inspection cover - 2 nos placed in opposite site
- h. Base channels with bi-directional rollers - 2 nos.
- i. Any other accessories which bidders think essential may also be included as optional.

29. Earthing: Earthing shall be as per IS-3043. All metal parts of the Transformers 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.

30. Wiring: All internal wiring shall be done with 1.1kv grade fire retardant PVC insulated tinned copper multi stranded cable 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 ferrules.

D. CABLE & CABLE TERMINATION

(i) As the HT incomer for each Transformers, OIL will supply one no. 240Sq.mm, 3 core, XLPE, armoured, 11KV grade, Aluminium Cable. However supply of cable termination kits etc. and terminating the HT cables to the Transformers end, during commissioning of the Transformers shall be in the vendor's scope.

(ii) On the LT side, per Transformers OIL will supply two nos. 400Sq.mm, 3½ core, XLPE, armoured, 1100V grade, Aluminium Cables. However supply of cable termination kits etc. and terminating the LT cables to the Transformers end, during commissioning of the Transformers shall be in the vendor's scope.

GENERAL TERMS AND CONDITIONS

- 1) Party should furnish all relevant technical particulars as mentioned in Appendix #B of IS: 2026 #1977, Part-I along with the quotation.
- 2) Bidder shall mention in the quotation the minimum size and type of the room with requirement of ventilation.
- 3) Bidder must indicate the storage procedure for the Transformers in case the Transformers are left un-energized.
- 4) List of installation & commissioning checks required for the Transformers must be enclosed with the offer.
- 5) Transformer winding shall be specially braced to withstand to thermal and mechanical stresses of harmonic current and voltage.

6) The Transformers shall be type tested and following CPRI Type test certificates on similar Transformers of specified rating should be furnished along with the quotation. 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.

7) 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.

8) Party should get the detail Transformer drawings approved from OIL prior to manufacturing of the Transformers.

9) Bidder should submit with quotation the list of customers to whom the bidder has supplied Transformer of similar rating & type (as per NIT) during last five years.

10) Bidder's shall submit the list of manufacturer's authorised dealers of eastern region along with the offer.

11) INSPECTION:

(i) The Transformers should be offered for pre-dispatch inspection at the manufacturer's works. 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 manufacturers works. The supplier should intimate OIL 15 days in advance prior to commencement of tests so that OIL can depute engineer for witnessing tests in time.

(ii) Materials shall be dispatched after factory acceptance test results comply with the specifications and testing results are within the tolerance limits.

(iii) Materials / equipments failed to conform to the specifications/during testing, OIL's Engineer shall have the right to reject the materials and in that case, the supplier will either replace the rejected materials or make necessary alterations to the satisfaction of OIL, to meet specifications requirements free of costs.

(iv) Party shall confirm in the offer, the availability of adequate facilities for following testing at the manufacturer's works which will be carried out during inspection along with other tests.

(A) ROUTINE TESTS:

- (a) Measurement of winding resistance of each winding of each phase at

principal tap and at all other taps.

(b) Measurement of voltage ratio(at all taps), polarity and check of voltage vector group.

(c) Measurement of impedance of voltage (principal tap, lowest and highest tap), short-circuit impedance and load loss at rated current.

(d) Measurement of no-load loss and no load current at normal & 112.5 % over voltage.

(e) Measurement of Insulation resistance & PI value.

(f) Induced over voltage withstand test

(g) One minute power frequency withstand voltage test

(h) Magnetic balance test

(i) Calibration of winding temperature indicators.

(B) TYPE TESTS:

(a) Temperature-rise test.

(C) SPECIAL TESTS:

(b) Partial discharge measurement,

(c) Measurement of acoustic sound level.

SPECIAL TERMS AND CONDITIONS

A)

1. Bidder shall fill the data sheet as per Annexure-I and the same shall be supported by suitable documents / literatures / technical leaflet etc. of various components.

2. Bidder shall provide the list of deviations from NIT specifications in the offer if any with justifications.

3. Bidder must submit detailed dimensional drawings of the transformers along with the bid.

4. Transformer manufacturer shall have the adequate manufacturing and testing facilities to carry out the routine tests of the Transformers as per BIS in their manufacturing works in India and should confirm the availability of the testing facility in the offer. Documentary evidence to this effect also shall be enclosed with the offer.

5. Copy of Electrical Supervising License of the electrical supervisor to be deputed for commissioning works at site shall be submitted along with the bid.

6. The copy of the type test certificates carried out on a 11 KV / 400V, 250KVA dry type Transformer shall be furnished along with the offer.

B)

1. Offer shall be complete in all respect to meet the technical specifications and general notes of the NIT.

2. Bid shall be complete with supply and installation & commissioning of the Transformers. Bids only for supply of the Transformers will not be considered for evaluation.

3. Bidder shall be either reputed manufacturer or authorised dealer of Dry Type Transformer having past experience of supplying to any State Govt. / Central Govt. / PSU. Bidder offering as an authorised dealer shall submit copy of valid dealership certificate from the OEM along with the offer.

<p>4. Experience/Credential:</p> <p>(i) Experience of OEM: Manufacturer should have more than five years experience of manufacturing 11 KV/400V, 250KVA or higher rated Dry Type Transformers supplying in any State Govt. / Central Govt. / PSU.</p> <p>Manufacturers with less than 5 years manufacturing experience, shall submit a Performance Certificate of two nos. similar or higher rated dry type transformers manufactured by them, from the customer (any State Govt. / Central Govt. / PSU) clearly mentioning minimum one year's successful on load operation as on bid closing date, to the full satisfaction of the customer.</p> <p>The bidder have to submit documentary evidence like copy of Purchase Order with invoice along with detailed Scope of Works and completion certificate / Performance Certificate along with the bid.</p> <p>(ii) Experience of Dealer: Documentary evidence showing experience of OEM as above shall be submitted by the authorised dealer along with a copy of valid dealership certificate.</p>	
<p><u>ITEM NO. 20</u></p> <p><u>INSTALLATION & COMMISSIONING – QTY = 1 AU</u></p> <p>NOTES ON INSTALLATION & COMMISSIONING</p> <p>1. The Transformers manufacturer or manufacturer's authorized dealer, who shall execute the installation & commissioning jobs should have valid electrical contractor license issued by the Govt. Photocopy of the Contractor's License shall be submitted along with the offer as documentary evidence</p> <p>2. The installation job shall be carried out under the direct supervision of a person holding an Electrical Supervising License / Certificate of Competency for installation of transformers from Govt. licensing board/ agency. Photocopy of valid Electrical Supervising License/Certificate of Competency along with a recent passport size photograph of the supervisor should be submitted to OIL before commencement of the installation & commissioning jobs. Installation and Commissioning works will not be allowed without licensed supervisor. Supervisor shall remain present all the time at site during installation and commissioning works.</p> <p>3. During installation and commissioning, every day before starting of works an Electrical Permit to Work (EPW) will be issued by Installation Manager, Moran Power Station. EPW shall be issued after taking all electrical safety precautions/ measures. Contractor should provide all the required support for ensuring safety of workers and properties. Contractor should not start any works before issuance of EPW and the same EPW should be returned every day at the closing of working hours.</p> <p>4. No electrical equipment/apparatus shall be energized in absence and without permission of OIL's Electrical Engineer involved with the job.</p> <p>5. All tools for installation and instruments for testing and commissioning shall be arranged/provided by the contractor.</p>	

<p>6. The Contractor has to submit all commissioning test records, operating & maintenance manuals and list of spares which needs to be maintained for Transformers to OIL.</p> <p>7. All the required Personal Protective Equipments (PPE) for the installation & commissioning workers at the site shall be provided by contractor.</p> <p>8. Cables:</p> <p>(i) As the HT incomer for each Transformers, OIL will supply one no. 240Sq.mm, 3 core, XLPE, armoured, 11KV grade, Aluminium Cable. However supply of cable termination kits etc. and terminating the HT cables to the Transformers end, during commissioning of the Transformers shall be in the vendor's scope.</p> <p>(ii) On the LT side, for each Transformers OIL will supply two nos. 400Sq.mm, 3½ core, XLPE, armoured, 1100V grade, Aluminium Cables. However supply of cable termination kits etc. and terminating the LT cables to the Transformers end, during commissioning of the Transformers shall be in the vendor's scope.</p> <p>(iii) All the commissioning items like cable termination kits, cable glands, termination lugs etc. shall be supplied by the contractor.</p> <p>9. The supplier shall install the transformers at the specific room / place in Moran Power Station. The installation work shall be as per the installation manual supplied by the manufacturer and in compliance with latest BIS, IE rules, Indian Electricity Act and the National Electric Codes.</p> <p>10. Pre-Commissioning Checks and Tests: After completion of installation of the Transformers at site, prior to commissioning, the following checks and tests shall be carried out on Transformers. These shall be carried out in accordance with relevant standards, codes of practices published by the Bureau of Indian Standards and manufacturers recommendations.</p> <p>(i) Assembly, check as per manufacturer's drawings and instructions.</p> <p>(ii) Physical inspection for damages and external defects.</p> <p>(iii) Check for proper fixing on foundation and tightness of foundation bolts.</p> <p>(iv) Check for proper tightness of Transformers & its control devices, cables and earth connections.</p> <p>(v) Check and calibrate meters, if any.</p> <p>(vi) Cleanliness at works area shall be maintained at the time of commissioning.</p> <p>11. TESTING:</p> <p>(i) Services of a specialist engineer from the manufacturer of the Transformers shall be made available at site for testing. The specialist engineer shall also explain the operating / maintenance procedure of the Transformers to OIL's operating / maintenance personnel.</p> <p>(ii) All tests shall be carried out in presence of engineers of OIL and the test results shall be approved by OIL.</p> <p>(iii) Following routine tests should be carried out at the site during commissioning:</p> <p>a) Measurement of winding resistance as per IS-2026.</p>	
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<p>b) Measurement of voltage ratio and check voltage vector relationship as per IS-2026</p> <p>c) Measurement of impedance of voltage (principle tapping) short circuit impedance and load loss as per IS-2026.</p> <p>d) Measurement of no load loss and current as per IS-2026.</p> <p>e) Insulation test on main HT/LT winding</p> <p>f) Insulation check of control circuits</p> <p>g) Any other test recommended by the manufacturer.</p> <p>(iv) All test results shall be recorded in a proper manner. 2 sets of test results shall be submitted to OIL. The results shall be typed and properly documented</p>	
<p><u>ITEM NO. 30</u></p> <p><u>500KVA, 11KV/433 VOLTS, 3 PHASE, 50 HZ, DOUBLE WINDING, COPPER CONDUCTOR, DRY TYPE, NATURAL AIR COOLED DISTRIBUTION TRANSFORMER FOR INDOOR INSTALLATION & AS PER FOLLOWING SPECIFICATIONS: QTY = 01 NOS</u></p> <p>TECHNICAL SPECIFICATIONS OF TRANSFORMER</p> <p>500kVA, 11Kv/433 Volts, 3 Phase, 50 Hz, double winding, copper conductor, Dry type, natural air cooled distribution transformer for indoor installation & as per following specifications:</p> <p>A. GENERAL:</p> <ol style="list-style-type: none"> 1. Applicable Indian Standard: IS: 11171, with latest amendments. 2. Service duty : Continuous. 3. Installation : Indoor. 4. Auxiliary power supply : 24V DC \pm 10 % 5. Control Voltage : 24V DC \pm 10 % 6. Make : NGEF, Cromton greaves, Alsthom(areva), Bharat Bijlee. <p>B. SITE CONDITION:</p> <ol style="list-style-type: none"> 1. a) Maximum Ambient air temperature : 40°C b) Minimum Ambient air temperature : 6.0°C 2. Maximum humidity at site (at 40 ° C) : 98 % 3. Surrounding atmospheric condition : Humid 4. Site altitude : 120 mtrs. 5. Seismic design co-efficient : As per IS: 1893. 6. Rainfall : 200 cm (annually.) <p>C. RATING AND GENERAL DATA:</p> <ol style="list-style-type: none"> 1. Rating : 500kVA 2. No. of phases : 3. 3. Frequency : 50 \pm 3 % 4. Type of Insulation: Class-F. Temp. rise-90 ° C 5. Partial discharge: As per IS-11171, IS-6209. 6. Type of cooling : AN 7. Installation : Indoor 8. Vector group : Dyn 11 	

9. Percentage impedance: 4.5%. Tolerance as per IS-2026.
10. Nominal system voltage: 11kV/ 433 Volts
11. Type of neutral earthing : NGR asseby & NGR Monitoring including enclosure.
12. Symmetrical short circuit withstands capacity: As per IS-11171.
13. Rated short duration power frequency withstands voltage: As per IS 11171.
14. 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.
15. Transformer sound level should not exceed 60 db.
- 16 Water absorption (24hrs @25C): less than 0.05% (superior insulation, longer life)
17. Chemical Resistance: Painting must have excellent performance rating.
18. Dielectric Strength: Minimum of 3200 volts/mil dry (for superior stress, Over voltage tolerance)
19. Dissipation Factor: Max. 0.02 @25 degree C to reduce aging of insulation.
20. TAP CHANGER:
- Type : Off-load (manual)
- Total tapping range : ± 5.0 %
- Tapping steps : In steps of 2.5 %.
- Markings shall be clear enough to indicate the tap position.
21. TERMINAL ARRAGEMENT:
- HV winding line end : Cable box
- LV winding line end : Cable box
- One neutral bushing outside the cable box shall be provided for grounding.
22. BUSHING:
- Made from non hygroscopic epoxy resin cast material suitable for site condition mention in Para- B & conforming to IS-2099.
23. CABLE BOX:
- a) HV cable box should be suitable for termination of 1 no. 3 C, 120 sq. mm XLPE armoured, aluminium conductor cable with heat shrink type cable termination. The bottom plate shall be detachable type and one no. heavy duty single compression cable gland suitable for 3x120 sqmm XLPE armoured cable shall be fitted. Cable Box standard should be as per IP-54.
- b) LV cable box should have brought out electro-tinned copper bus bars of suitable rating & size for termination of 3 nos. of $3\frac{1}{2}$ x 240 sq. mm Aluminium cable. 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.
- c) Terminals should be marked as per IS: 2026 -1977.
24. TRANSFORMER CORE:
- a) Material : High grade cold rolled grain oriented silicon steel.
- b) Structure : Grounded and sharp corners avoided.
- c) Lamination : Treated and coated with suitable insulations. The core limbs & yokes are banded by means of resin glass tape to reduce vibration & noise.
25. TRANSFORMER WINDING:
- The winding material should be high conductivity 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.

The jointings should be as under:

- a) Permanent joints : Welded/ brazed.
- b) Bolted connection : Provided with locking devices.

26. 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.

27. Name plate:

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

- (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.

28. Lifting hook.

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

29.. LIST OF FITTINGS AND ACCESSORIES:

- a. HV bushings inside HV cable box: 3 nos. rated for 11kV.
- b. LV bushings in side LV cable box : 3 nos. rated 433 Volts
- c. Outside LV cable box : 1 no. for grounding.
- d. Digital Winding temperature scanner connected with three nos. RTDs, one each for each LV winding, should be provided in a metallic enclosure that is mounted on the main enclosure. The scanner should provide indication, alarm & trip contacts. Winding temperature indicator should show maximum temperature attained. The RTDs should be properly wired up to the scanner terminals. .
- e. Earthing terminals - 2 nos for body earthing.

- f. Jacking lugs.
- g. Inspection cover - 2 nos placed in opposite site
- h. Base channels with bi-directional rollers - 2 nos.
- i. Any other accessories which bidders think essential may also be included as optional.

30. Earthing: Earthing shall be as per IS-3043.

31. Wiring:

All internal wiring shall be done with 1.1kv grade fire retardant PVC insulated tinned copper multi stranded cable 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 trouble shooting/ maintenance. All cable shall have ferules.

32. INSPECTION.

(i) All the routine tests and specified special tests as per IS:11171 are to be carried out in presence of OIL's Engineer at manufacturers 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 effected only if the test results comply with the specifications and testing results.

(iii) Materials / equipments 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.

33. GENERAL TERMS AND CONDITIONS:

1. Party should furnish all relevant technical particulars along with the quotation.
2. The transformer will be housed inside a room with brick walls on three sides & XPM sheet wall on one side. Bidder should mention in the quotation the minimum size of the room and the size of openings required for ventilation.
3. Bidder must indicate the storage procedure for the transformer in case the transformer is left un-energized.
4. List of installation & commissioning checks required for the transformer must be enclosed with the offer.
5. Transformer winding shall be specially braced to withstand to thermal and mechanical stresses of harmony current and voltage.
6. Type test certificate on similar transformer should be furnished along with the quotation. 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.
7. 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.
8. The transformer should be offered for pre-dispatch inspection and all routine tests as per IS: 11171 should be carried out in presence of OIL's engineer.
9. Party should get the detail transformer drawings approved from OIL prior to manufacturing of the transformer.
10. Bidder should submit with quotation the list of customers to whom the bidder has supplied transformers of similar rating & type (as per NIT) during last five years.
11. Bidder shall separately quote for instalation and commissioning of the transformer as per

<p>terms & conditions specified under Installation & commissioning.</p> <p>12. Bidder should also consider the cost of NGR assembly & NGR monitoring including suitable enclosure while quoting the value of transformer as this is one of vital part of transformer for earthing.</p> <p><u>34.SPECIAL TERMS AND CONDITIONS</u></p> <p>1. Offer shall be complete in all respect to meet the technical specifications and general notes of the NIT.</p> <p>2. Bid shall be complete with supply and installation & commissioning of the Transformers. Bids only for supply of the Transformers will not be considered for evaluation.</p> <p>3. Bidder shall be either reputed manufacturer or authorised dealer of Dry Type Transformer having past experience of supplying to any State Govt. / Central Govt. / PSU. Bidder offering as an authorised dealer for supply of materials(transformer) shall submit copy of valid dealership certificate from the OEM along with the offer.</p> <p>4. Bidder shall fill the data sheet as per Annexure-I and the same shall be supported by suitable documents / literatures / technical leaflet etc. of various components.</p> <p>5. Bidder must submit detailed dimensional drawings of the transformers along with the bid.</p> <p>6. Transformer manufacturer shall have the adequate manufacturing and testing facilities to carry out the routine tests of the Transformers as per BIS in their manufacturing works in India and should confirm the availability of the testing facility in the offer. Documentary evidence to this effect also shall be enclosed with the offer.</p> <p>7. Copy of Electrical Supervising License of the electrical supervisor to be deputed for commissioning works at site shall be submitted along with the bid.</p> <p>8. The copy of the type test certificates carried out on a 11 KV / 433V, 500KVA dry type Transformer shall be furnished along with the offer.</p>	
<p><u>ITEM NO. 40</u></p> <p><u>INSTALLATION AND COMMISSIONING – QTY = 1AU</u></p> <p>GENERAL NOTES ON INSTALLATION & COMMISSIONING</p> <p>1. The installation and commissioning works shall be done by the manufacturer or by the manufacturer's authorized party.</p> <p>2. The contractor or any other third party on behalf of the contractor who shall execute the installation & commissioning jobs should possess valid electrical contractor license issued or recognized by the state government of Assam. In this regard, documentary evidence (Copy of contractor license) shall be submitted along with the offer.</p> <p>3. The jobs shall be carried out under the direct supervision of a person holding a certificate of competency and by a person holding a permit. In this regard, related documentary evidence (Copy of certificate of competency and of permit) should be produced prior to commencement of the installation & commissioning jobs.</p> <p>4. The vendor shall obtain permit to work from OIL's Engr.-in-charge before taking up installation and commissioning works.</p> <p>5. All tools for installation and instruments for testing and commissioning shall be arranged / provided by the vendor.</p> <p>6. The party who executes the order of item Sl. No.10 shall be responsible for installation and commissioning of the transformer.</p> <p>7. The installation & 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.</p>	

8. Transformer earthing system should be of NGR system. Supply and commissioning of NGY system is the scope of vendor. Catalogues/literature for NGR system should be submitted with the offer for our evaluation.

TECHNICAL NOTES ON INSTALLATION AND COMMISSIONING:

Installation and Commissioning of 500kVA, 11Kv/433 Volts 3

Phase & neutral, 50 Hz, double winding, copper conductor, Dry type, natural air cooled distribution transformer as per item Sl No. 10.

(A) Installation:

1. The supplier shall dispatch the materials to site under OIL's operational Area, Moran. The bidder shall install the Transformer in the specified site of OIL. The installation work shall be as per the installation manual supplied by the manufacturer and in compliance with latest BIS, IE rules, Indian Electricity Act and the National Electric Codes.

2. OIL will supply & terminate H.T & LT power cable with termination kit.

3. All other materials required for installation of the Transformer including the earthing materials shall be supplied and done by the authorised person of the bidder.

(B) Pre-Commissioning Checks and Tests:

After completion of installation of the transformer at site, prior to commissioning the following checks and tests shall be carried out on transformer. These shall be carried out in accordance with relevant standards, codes of practices published by the Bureau of Indian Standards and manufacturers recommendations.

The following checks shall be made on the transformer prior to commissioning:

- i) Assembly, check as per manufacturer's drawings and instructions.
- ii) Physical inspection for damages and external defects.
- iii) Check for proper fixing on foundation and tightness of foundation bolts.
- iv) Check for proper tightness of transformer & its control devices, cables and earth connections.
- v) Check and calibrate meters, if any.
- vi) Cleanliness at work area shall be maintained at the time of commissioning.
- Vii). Confirming the healthiness of NGR system.

(C) TESTING:

1) Services of a specialist engineer from the manufacturer of the transformer shall be made available at site for testing.

The specialist engineer shall also explain the operating / maintenance procedure of the transformer to OIL's operating / maintenance personnel.

2) All tests shall be carried out in presence of engineers of OIL and the test results shall be approved by OIL.

3) Following routine tests should be carried out at the site during commissioning:

- i) Measurement of winding resistance as per IS-2026.
- ii) Measurement of voltage ratio and check voltage vector relationship as per IS-2026
- iii) Measurement of impedance of voltage (primary tapping) short circuit impedance and load loss as per IS-2026.
- iv) Measurement of no load loss and current as per IS-2026.
- v) Insulation test on main HT/LT winding
- vi) Insulation check of control circuits
- vii) Any other test recommended by the manufacturer.

4) All test results shall be recorded in a proper manner. 2 sets of test results shall be submitted to OIL. The results shall be typed and properly documented.	
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NOTE:

1. Freight charge upto Moran (OIL) to be quoted against each item indicating approximate weight and volume of the consignment.

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

TECHNICAL DATA SHEET FOR TRANSFORMER
(To be filled in by the Bidder)
(To be submitted separately for item no. 10)

Sr. No.	TECHNICAL PARTICULARS	SPECIFICATIONS
1	Type of Transformer	
2	Service	
3	KVA Rating (continuously rated)	
4	Duty	
5	Rated Voltage	
	(a) HV (Volts)	
	(b) LV(VOLTS)	
6	Rated Frequency	
7	No. of Phases	
8	Type of Cooling	
9	Winding Connection	
10	Tappings	
	(a) Range	
	(b) No. of steps	
	(c) In steps of	
	(d) Tapping provided on HV side	
11	Tap changer type	
12	Vector Group	
13	Reference ambient temperature	
14	Temperature rise winding	
15	Class of Insulation	
16	% Impedance	
17	Physical Dimensions	
	(a) Length (in mm)	
	(b) Width (in mm)	
	(c) Height (in mm)	
18	Approximate weight	
	(a) Core and Windings (Kgs)	
	(b) Total Weight (Kgs)	
19	Iron losses at normal voltage ratio	
20	Copper losses at normal voltage ratio at full load	
21	Efficiency at unity power factor	
	(a) Full load	
	(b) 75% load	
	(c) 50% load	
22	Regulation	
	(a) at unity power	
	(b) at 0.8 power factor	
23	Reference standards	
24	Method of Earthing	
25	Fittings and Accessories	
	(a) Off circuit tap links	
	(b) Earthing terminals	
	(c) Rating and Diagram Plate	
	(d) Lifting Lugs for Complete Transformer	
	(e) Cover Lifting Lugs	
	(f) Bidirectional Rollers	
	(g) Digital Temperature Scanner	
26	Transformer Type Tested	

ANNEXURE-1

TECHNICAL DATA SHEET FOR 500KVA, DRY TYPE TRANSFORMER,

11KV/433V

(To be filled in by the Bidder for Item No. 30)

Sr. No.	T ECHNICAL PARTICULARS	SPECIFICATIONS
1	Make & Model of Transformer	
2	Service	
3	KVA Rating (continuously rated)	
4	Duty	
5	Rated Voltage	
	(a) HV (Volts)	
	(b) LV(VOLTS)	
6	Rated Frequency	
7	No. of Phases	
8	Type of Cooling	
9	Winding Connection	
10	Tappings	
	(a) Range	
	(b) No. of steps	
	(c) In steps of	
	(d) Tapping provided on HV side	
11	Tap changer type	
12	Vector Group	
13	Reference ambient temperature	
14	Temperature rise winding	
15	Class of Insulation	
16	% Impedance	
17	Physical Dimensions	
	(a) Length (in mm)	
	(b) Width (in mm)	

	(c) Height (in mm)	
18	Approximate weight	
	(a) Core and Windings (Kgs)	
	(b) Total Weight (Kgs)	
19	Iron losses at normal voltage ratio	
20	Copper losses at normal voltage ratio at full load	
21	Efficiency at unity power factor	
	(a) Full load	
	(b) 75% load	
	(c) 50% load	
22	Regulation	
	(a) at unity power	
	(b) at 0.8 power factor	
23	Reference standards	
24	Method of Earthing for neutral	
25	Method of earthing for body.	
26	Fittings and Accessories	
	(a) Off circuit tap links	
	(b) Earthing terminals	
	(c) Rating and Diagram Plate	
	(d) Lifting Lugs for Complete Transformer	
	(e) Cover Lifting Lugs	
	(f) Bidirectional Rollers	
	(g) Digital Temperature Scanner	
27	Transformer Type Tested	
28	NGR system for transformer neutral earthing.	
29	Other information if any	
30.	Whether literature/catalogue/leaflet enclosed in supporting for all above?	

Bidders Response Sheet**Annexure-FFF**

Tender No.	
Bidders Name	

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 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:	
	c) Name and Full Address of Issuing Bank:	
12	Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the tender.	
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	Confirm that the Integrity Pact submitted is in toto as per format provided in the tender.	
17	Whether submitted documents in support of General Qualification criteria of NIT	
18	If bidder is Small scale unit whether you have quoted your own product	
19	If bidder is Small scale unit whether you are eligible for purchase preference (as per Govt guideliness)	
20	Whether filled up the bank details for online payment as per Annexure GGG	

NOTE: Please fill up the greyed cells only.

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 been filled in by the bidders 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 HAVE 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		

NOTE: Please fill up the greyed cells only.

**(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETTER 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.