

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
SDI1622P17 Dt. 01.07.2016 Single Stage Composite Bid System	04.08.2016	Nitrogen Generating & Filling Plant
SDI1057P17 Dt. 10.05.2016 Single Stage Composite Bid System	04.08.2016	LT Panel
SDI1624P17 Dt. 01.07.2016 Single Stage Composite Bid System	04.08.2016	Centrifugal Pump
SDI1625P17 Dt. 01.07.2016 Single Stage Composite Bid System	04.08.2016	4 Way RMU
SDI1626P17 Dt. 01.07.2016 Single Stage Composite Bid System	04.08.2016	Street Lightning Control DB
SDI1632P17 Dt. 02.07.2016 Single Stage Composite Bid System	04.08.2016	Street Lightning Pole with Luminaire
SSI0628P16 Dt. 18.03.2016 Single Stage Composite Bid System	04.08.2016	Galvd. Wire- 3MT and Galvd. Barbed Wire-20MT from MSE Vendor
SSI1488P17 Dt. 16.06.2016 Single Stage Two Bid System	04.08.2016	Paints

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. : SDI1625P17 Dt. 01.07.2016

Tender Fee : Rs 1,000.00

Bid Security : Applicable

Bidding Type : SINGLE STAGE COMPOSITE BID SYSTEM

Tender Type : Open Tender

Bid Closing / Opening on : As mentioned in the e-portal

Performance Security : Applicable

Integrity Pact : Not Applicable

OIL invites Bids for **Supply, Testing & Commissioning of 4 Way RMU** 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 of Indigenous 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 = 0374-2807178, 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 of Indigenous 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) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- g) 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).
- h) 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 Technical and Financial Criteria:

In addition to the general BRC/BEC, following Technical and Financial criteria shall be considered as on the original Bid Closing Date. (**Documentary evidence to be provided along with the bid in Technical RFx -> External Area -> Tender Documents failing which the offer shall be rejected**).

Criteria	Complied / Not Complied. Documentary evidence submitted / not submitted
a) The bidder should have experience of supplying, installation, testing and commissioning of Minimum 1no of 11KV 2way/3way/4way RMU panel of minimum value of Rs.4,81,500.00 in any Central Govt/ State Govt/ PSUs during last 5(five) as on bid closing date. The bidder should submit documentary evidence in support of their offer like purchase order/ works order with detailed scope of work and completion certificate, performance certificate along with bid.	
b) Annual financial turnover of the firm in any of the preceding 3 financial years should not be less than Rs. 4.81 Lakhs.	
c) Net Worth of the firm should be Positive for preceding financial / accounting year.	

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 Report , Balance Sheet and Profit and Loss Account certified by a chartered accountant.

2.0 Vendors having OIL's User ID & password may pay Tender Fee 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, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL's e-tender portal and then pay Tender Fee on-line 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 the form of crossed "Payee Account only "Bank Draft/Bankers' Cheque drawn by Bank and valid for 90 days from the date of issue of the same or in the form of Indian Postal Orders payable to the OIL is to be sent to **DGM-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:

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they shall apply to DGM-Materials, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of Tender Fee upto one week prior to the Bid closing date (or as amended in e-portal).

3.0 The tender is invited under SINGLE STAGE- COMPOSITE BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

3.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> User - > Technical Bid only.

4.0 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 **DGM- 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 Duplicate.

5.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL's Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go through ANNEXURE – I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details. MSE bidders are exempted from submission of Tender Fees and Bid Security/Earnest Money provided they are registered for the items they intend to quote.

6.0 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.

7.0 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.

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

9.0 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 of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

10.0 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.

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

12.0 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 terms and conditions of NIT.

Yours Faithfully

Sd-

(R. BARMAN)

SR MANAGER MATERIALS (IP)

FOR : DGM-MATERIALS

Tender No & Date: SDI1625P17 Dt. 01.07.2016**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 of Indigenous 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 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.</p> <p>A) COMMERCIAL:</p> <p>i) Validity of the bid shall be minimum 90 days from the Bid Closing Date.</p> <p>ii) Bid security: The bid must be accompanied by Bid Security of Rs 19,000 in OIL's prescribed format as Bank Guarantee or a Cashier's cheque or Demand Draft 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 6 months from Bid closing date. (i.e. upto 04.02.2017). Cashier's cheque or Demand Draft shall be valid for minimum 90 days or as per RBI's guidelines, drawn on “Oil India Limited” and payable at Duliajan, Assam</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>	

For exemption for submission of Bid Security, please refer Clause No. 8.16 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous 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.

iii) Bids are invited under “Single Stage Composite Bid System”. Bidders have to submit both the “Techno-commercial Unpriced Bids” and “Priced Bids” through electronic form in the OIL’s e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

iv) Performance Security:

The successful bidder shall submit Performance Security @ 10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in any one of the following forms :

(a) A Bank Guarantee in the prescribed OIL’s format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.

(b) A Cashier's cheque or Demand Draft with validity of minimum 90 days or as per RBI’s guidelines, drawn on “Oil India Limited” and payable at Duliajan, Assam.

The Performance Security for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning plus 3(three) months or 18 months from the date of shipment/despatch plus 3(three) months whichever concludes earlier. However, for consumables like chemicals, cement, tubular etc. the Performance Security shall be valid for 12 months from the date of shipment/despatch plus 3(three) months.

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.

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.

(d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.

x) Delivery :

i) Maximum Delivery of Materials: 9 months from the date of receipt of order from OIL.

ii) Maximum Delivery for Installation & Commissioning: 2 months from the date of acceptance of materials by OIL.

2.0 BID EVALUATION CRITERIA (BEC)

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:

i) 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) A job executed by a bidder for its own organization / subsidiary cannot

be considered as experience for the purpose of meeting BEC.	
iii) 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:

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

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI1625P17 Dt. 01.07.2016

	Complied / Not Complied. (Remarks if any)
<p>ITEM NO. 10: 4 WAY RMU 11 KV, (QNTY. – 1 No.)</p> <p>Supply of 1no of 11KV 4-Way RMU consisting of 2 Isolator as Incomers & 2 VCBs as OUTGOING with 8no of termination kits.</p> <p>1.0 SCOPE: This specification covers supply, installation, testing and commissioning of 11kV SF6 insulated Ring Main Unit with VCBs. The RMU shall be outdoor type comprise of two (02) Nos. Load Break Switch and two (02) Nos. Vacuum Circuit Breaker, should be as per IS/IEC 62271 standards. The design, materials and manufacture of the equipment shall be ensure continuous and trouble-free service over the years.</p> <p>2.0 APPLICABLE CODES AND STANDARDS: The latest revision / amendments of the following codes and standards shall be applicable for the equipment: IS/IEC 62271-part 100: High-voltage alternating-current circuit breakers. IS/IEC 62271-part 102: Alternating current disconnecter (isolators) and earthing switch. IS/IEC 62271-part 20: AC metal-enclosed switchgear and control gear for rated voltage above 1kV and up to and including 52 kV. IEC 60376: Specification and acceptance of new Sulphur hexafluoride. IEC 60529: Classification of degree of protection provided by enclosures.</p> <p>3.0 DESIGN AND CONSTRUCTION REQUIREMENTS: The ring main unit shall consist of the following configurations: (i) 2 Nos. 630A, 11kV Load Break Switches with integral Earth Switch. (ii) 2 Nos. 400A, 11kV Vacuum Circuit Breakers with 2 nos. self-powered microprocessor based IDMT, 2 O/C + 1 E/F numerical relays. (iii) Load break switches, Earth switches, Vacuum circuit breakers are non-draw able, fixed type and all are inside the RMU panel. (iv) Insulation medium of make/ break contacts of the LBS's are inside SF6 gas and VCB's are inside vacuum.</p> <p>4.0 11KV RMU Design: i) Ring main unit shall be design to withstand of short circuit current of 21 kA for 3 second or more at 11 kV nominal voltages, shall be non-draw out type, fix position. ii) Insulation medium for panel (LBS): SF6. iii) Insulation medium of circuit breaker: Vacuum bottle type iv) Hardware (handle & nut and bolts) Stainless steel (except terminal nut & bolts, which are brass or tinned copper) v) Gasket: Neoprene rubber. vi) Panel cove fixing bolts: Allen head 6mm with hexagonal slot.</p>	

vii) Explosion vents: To ensure operator safety, design should ensure that gases flames generated during flush over/ blast in any of the compartment must not come out from the front of RMU, it must be submitted support above along with GA drawing indicating those vents.

5.0 Load break switches (LBS):

- i) Continuous Rating: 630A
- ii) Short time withstands capacity: 21kA for 3 sec.
- iii) Fault making capacity: 50kA peak
- iv) Minimum number of operation at rated current (as per IEC: 62271-102): Class M1
- v) Minimum number of operation at fault current (as per IEC: 62271-102): Class E3
- vi) Fault passage indicator: To be providing right hand side of LBS.
- vii) Make of the Load break switches (LBS): Shall be mentioned with offer.
- viii) Arc interruption in dielectric medium: SF6
- ix) Operating mechanism for close/open: Manual operation.

6.0 Circuit breakers (CB):

- i) Type: 3 Pole operated simultaneously by a common shaft.
- ii) Arc interrupter in dielectric medium: Vacuum bottle.
- iii) Operating mechanism: Manual spring charged store energy type.
- iv) Continuous rating: 400A
- v) Short time withstand: 21kA for 3 sec.
- vi) Fault making capacity: 50kA
- vii) Fault breaking 21kA
- viii) Trip coil as per relay's (self-powered) requirement
- ix) Minimum number of operation at rated current (as per IEC: 62271-100): Class M1
- x) Minimum number of operation at fault current (as per IEC: 62271-100): Class E3
- xi) Current Transformer:
 - a) CT Ratio: 2 core (for protection and metering):100/200/5/5
 - b) CT accuracy class for Protection: 10P10.
 - c) CT accuracy class for metering: one
 - d) CT Burden: 15VA or as required by relay functioning.
- xii) Protection Relay: Self powered, Microprocessor based Numerical relay (with LCD display) IDMT over current and earth fault protection with high set element. Manual reset type, flush mounting and mounted in front of panel. Relay make: Ashida-ADR 14IS/VIP 300 or equivalent. The circuit breaker unit fitted with 3 class X protection CT's, a low burden trip coil and auxiliary switch assembly allowing the use of a self-powered (no external DC source required) microprocessor based 3phase overcurrent and single earth fault relay. The relay should be housed within a Pilot cable box accessible from the front.
The protection curves and all other settings shall be adjustable through rotary switches which when viewed from the front clearly show the unit settings. Note: DIL type switches are not acceptable. Relay make: Ashida-ADR 14IS/VIP 300 or equivalent. Self-powered relay take power from CT, after tripping operation and no current available to view the fault current during the time, relay take power from Battery. Battery on push to view the fault current.
- xiii) Battery: 3.6V/3600mAH NiCad rechargeable battery normally battery maintain charge through CT, when there will be no power at CT Supply to relay.
- xiv) The power up time for the unit should be no greater than 40mS. The relay should give local mechanical indication of a fault operation and should differentiate between overcurrent and earth faults. It should be possible for the relay to perform a self-check giving clear indication of the status of the overcurrent and earth fault elements.

7. 0. Bus bar:

7.1 Tinned copper with sleeve (sizing calculation to be submitted in support of its guaranteed S.C rating /capability with the offer)

- i) Bus bar continuous rating current: 630A (at 40 deg. C ambient)
- ii) Bus bar short time withstands capacity: 21kA for 3 sec.
- iii) Bus bar support insulator materials: SMC/DMC resin
- iv) Maximum temperature rise: In line with table-3 of IEC 60694.

7.2 Earthing:

- i) Earth bus: GI flat sized for rated fault duty for 3 sec.
- ii) Earth bus internal connection non-current carrying metal parts with 2.5 sq. mm, 1.1kv, single core, multi stranded copper cable.
- iii) Earth bus connection points: Both sides' holes for M 10 bolt.

8.0. RMU panel construction:

- i) Panel type: Metal enclosed, framed, compartmentalized panel construction.
Service location: Non air-conditioned environment, outdoor type
- ii) Mounting: Free standing.
- iii) Overall enclosure protection: IP 54 minimum, vermin proof.
- iv) Doors: Front access with anti-thief hinge arrangement, minimum three hinges. Hinges arrangement shall ensure that door cannot be remove. Common lock and key for additional protection from thief
- v) Covers: Bolted for rear access with handle. Support for handle shall be provided suitable place of RMU body. All the accessible bolts / screws shall be vandal proof. One set of require special tools for RMU shall be scope of supply.
- vi) Construction: sheet metal 2.5mm thick CRCA.
- vii) Base Frame: Frame shall be completely covering all four sides by MS plate/sheet. Cable box compartment should be extended up to base frame bottom to have metallic separators between each feeder at base frame level too. Painting should match with RMU shed with fixing bolts and foundation bolts. Cable suitable for 240 sq.mm XLPE aluminium cable.
- viii) Lifting Lug: Minimum two numbers.
- ix) Cooling arrangement: By natural air without fan.
- x) Panel internal wiring: multi- core, multi-colour flexible copper cable, 2.5 sq.mm for "CTs" 1100v grade.
- xi) Minic: Front of the panel with description of function direction of operation of handle/button ,
- xii) Minic diagram shall be inside the front door (not acceptable with strikers)
- xiii) Operating Instruction: One operating instruction chart and Do's & don't to be display on left /front side of panel enclosure on anodized AL sheet 16SWG, duly affix on panel.
- xiv) Name plate and Name plate details: Month & Year of manufacturer, Equipment type, input and output rating, Purchaser name& purchase order.

9. 0 Cable Termination Kit and entry size:

- i) Cable type and size: 11KV, 3C x 240 sq.mm aluminium conductor XLPE (armoured).
- ii) Terminal for 11kv cable termination: Suitable for ring type bimetallic lug.
- iii) Bimetallic washer: Required.
- iv) Termination type: Total 8no of heat sinkable typetermination kits (4no of outdoor type & 4no of indoor type) suitable for 3C x 240 Sq. mm XLPE(Armoured), 11KV to be supplied along with the RMU panel for commissioning of panel at site. Make of Kits: Raychem/Heat shrink/ Xicon.
- v) Termination height: Minimum height from gang plate shall be 900mm.

11. 0 System parameters:

- i) System Voltage: 11kv.
- ii) Frequency: 50 Hz

- iii) System fault level: 10kA
- iv) Type of Grounding: solidly grounded.
- v) Fault clearing time (CB) :<100ms.
- vi) Design Voltage: 12kv.
- vii) Power frequency withstand voltage: 28kv

12.0 Indications:

- i) Operating counter: To be provided for each LBS & Circuit breaker with minimum four digits & non resettable type. (On front /inside the RMU LT chamber.)
- ii) Cable charge status (indication for all LBS): Capacitor type voltage indicators with LED on all the phases (shall be clearly visible in day light)
- iii) Spring charge status (mechanical type): In front of CB
- iv) Earth switch close/open indication (mechanical type): In front of earth switch.
- v) LBS on/off indication: mechanical indication (O and I)
- vi) SF6 gas pressure: Meter (Digital/Analogue)

13.0 Earth switches (ES):

- i) Type: Three pole operating simultaneously by common shaft for each LBS and CB.
- ii) Switching in dielectric medium: Dry air in seal medium or SF6 gas.
- iv) Operating mechanism for close & open: Manual.
- v) Fault making capacity: 50kA (desirable)

14.0 Interlocks:

- i) Load break switch and respected earth switch: Only one in close condition at a time (mechanical interlock)
- ii) Preventive the removal of respective cable cover if load break switch or circuit breaker is on: Mechanical interlock.
- iii) Cable test plug for LBS or CB accessible if earth switch connected with earth: Mechanical interlock.

15. 0 Danger Plates:

Danger plate shall be provided at the front and back side of the ring main unit.

16. DOCUMENTS TO BE SUBMIT ALONG WITH OFFER:

16.1. Type Tests:

- i) The RMU shall successfully type tested at govt. approved laboratories of India or equivalent international laboratories, in line with the relevant standard and technical specification of similar RMU tested within the last 5 (five) years from the date of the offer, the bidder shall be required to submit complete set of the type test reports along with the offer. Otherwise the offer may be rejected. RMU should be tested for internal arc fault test as per the latest IS/IEC 62271-200 for 21KA/0.1 sec. This test shall be performed in cable compartment as well as the stainless steel HV enclosure and the valid type test reports shall be submitted for technical evaluation.
- ii) GA drawing: GA drawing of the prefabricated RMU showing dimensional details shall be submit along with the offer
- iii) RMU foundation: RMU foundation detailed drawing shall be submit along with the offer
- iv) Technical specification of all equipment
- v) Bill of materials with catalogues of various components.
- vi) List of recommended spare parts with part no. for two year

17. 0 Approval Drawing:

- i) The successful bidder shall obtain approval for the following drawings, documents. All

<p>electrical details shall be submitted within 45 days of placement of order. OIL shall require minimum 30 days' time for approval of drawings. The approval time may increase depending upon clarifications required from the bidders.</p> <p>ii) GA drawing showing all details, including constructional detail, foundation detail and component layout of the prefabricated RMU.</p> <p>iii) Four sets of the following documents shall be submitted with the supply</p> <p>18.0 Special note: Bidder shall confirm in the bid that:</p> <p>i) The installation, testing & commissioning of 11KV SF6 outdoor type RMU will be carried out under supervision of experienced supervisor certificate of competency for carrying out 11kv works valid for operating in Assam.</p> <p>ii) All electrical works shall be carried out by person having valid supervisor certificate of competency for operating in Assam.</p> <p>iii) Services of specialist Engineer from manufacturer shall be required at site for commissioning of the RMU with testing of numerical relay.</p> <p>iv) Manufacturer of prefabricated 11KV outdoor type RMU shall have the testing facilities to carry out the routine tests of the RMU in their manufacturing works.</p> <p>vi) Attached annexure-I to be filled and submitted by the bidder along with the offer for our evaluation, otherwise the offer may be rejected.</p> <p>19.0 TEST AND INSPECTION:</p> <p>i) The RMU shall be inspected by OIL engineer at manufacturer's work prior to dispatch.</p> <p>ii) Routine tests on the RMU including primary & secondary injection tests of relays in accordance with IS/IEC shall be carried out at the manufacturers works which shall be witnessed by OIL engineer.</p> <p>iii) The supplier shall give 15 days' advance intimation to OIL regarding inspection for deputing Engineer.</p> <p>20.0 WARRANTY:</p> <p>i) The equipment shall be of best quality and workmanship. The RMU with all electrical equipment shall be guaranteed for 12 (Twelve) months from the date of commissioning against defects arising due to material, workmanship or design.</p> <p>ii) Make of 4-Way RMU: ABB / Siemens / Schneider</p>	
<p>ITEM NO. 20: INSTALLATION, TESTING & COMMISSIONING, (QNTY. – 1 AU)</p> <p>INSTALLATION, CONNECTION, TESTING AND COMMISSIONING OF RMU PANEL:</p> <p>i) Shall be carried out by specialist engineer required from manufacturer for testing of RMU. A person holding the certificate of competency of supervising and skilled technician is required at the time of energizing of panel.</p> <p>ii) Tools and tackle should be provided by supplier for testing of the panel.</p> <p>iii) IR value of the panel shall be checked before energizing. Earth resistance value shall also be checked before energizing of prefabricated RMU.</p> <p>iv) Earthing: Earthing of the prefabricated RMU shall be in the scope of supplier. All the materials required for earthing shall be brought by the supplier. The entire earth electrode should be connected together and resistance of earth should be less than 5 ohm. Earth electrode shall be connected with 50mm×6mm GI Strap.</p> <p>v) The party shall develop foundation designs for the RMU based on the information/drawing</p>	

furnished by the manufacturer of the RMU duly approved by OIL Engineer in Charge. vi) Shed construction: The party shall construct shed and foundation for RMU panel as per OEM recommendation. (vii) The successful bidder shall obtain drawing approval from OIL for design & construction of shed for RMU Panel.	
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NOTE:

- 1) Quotation along with technical catalogues/literatures, dimensional drawings should be forwarded to us for technical evaluation.
- 2) The bidder should have successfully completed in supply and commissioning of minimum 1no of 11KV RMU in any central Govt. /Govt. PSU/Public Limited Companies during the last 5 years. Copy of Work Order/SES/Completion certificate must be submitted along with the offer.
- 3) Prefabricated 11KV RMU panel should be guaranteed for minimum one year period from the date of commissioning. Duly stamped Guarantee certificate should be supplied along with the material.
- 4) Material to be packed properly with marking of handling instruction to avoid transit damage and water ingress.
- 5) Copy of test certificates for 11KV RMU panel should be submitted along with the offer.
- 6) The party should inform OIL for the inspection of RMU Panel at their premise/workshop before its dispatch.
- 7) Installation, Testing and Commissioning of 11KV RMU panel at site including civil foundation and Shed for panel should be executed as per terms and conditions mentioned in NIT.
- 8) The offered RMU should have been successfully type tested at NABL approved laboratories in India or equivalent international laboratories in line with the relevant standard and technical specification, within the last 5 (five) years from the date of offer. The bidder shall be required to submit complete set of the type test reports along with the offer.
- 9) **The bidder should have experience of supplying, installation, testing and commissioning of Minimum 1no of 11KV 2way/3way/4way RMU panel of minimum value of Rs.4,81,500.00 in any Central Govt/ State Govt/ PSUs during last 5(five)as on bid closing date. The bidder should submit documentary evidence in support of their offer like purchase order/ works order with detailed scope of work and completion certificate, performance certificate along with bid.**
- 10) Bidder must submit filled data sheet as per attached **ANNEXURE-I**

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

Annexure- I

Guaranteed Technical Particular for 4-way Ring Main Unit-11kV extensible RMU (outdoor type):

1.0 SWITCHGEAR ASSEMBLY:

- 1.1 Make:
- 1.2 Type:
- 1.3 Reference Standards:
- 1.4 Voltage (Normal/Max.) kV:
- 1.5 Phase (Nos.):
- 1.6 Frequency (HZ):
- 1.7 Short Circuit rating
 - a) Breaking Symmetrical (KA):
 - b) Breaking Asymmetrical (KA):
 - c) Short time for 1 Sec. (KA):
 - d) Short time for 3 Sec. (KA):
- 1.8 Insulation Level
 - a) Impulse withstand (KV peak):
 - b) 1 Minute 50 Hz. Voltage withstand (KV rms):
- 1.9 Metal Clad Construction Yes/No:
- 1.10 Degree of protection:
- 1.11 Switchgear completely wire and tested at factory: Yes/No:

2.0 CONSTRUCTION:

- 2.1 Overall Dimensions
 - a. Breaker
 - i) Length (MM):
 - ii) Breadth (MM):
 - iii) Height (MM):
 - b. Isolator
 - i) Length (MM):
 - ii) Breadth (MM):
 - iii) Height (MM):
 - c. Total Non Extensible 4Way RMU
 - i) Width (W) (mm):
 - ii) Depth (D) (mm):
 - iii) Height (mm):
- 2.2 Weight:
 - a) Breaker (Kg):
 - b) Isolator (Kg):
 - c) Extensible 4 Panel RMU (Kg):

3.0 BUS BAR:

- 3.1 Make:
- 3.2 Material & Grade:
- 3.3 Reference Standard:
- 3.4 a) Cross sectional area (mm²):
 - b) Size (mm²):
- 3.5 Continuous Current
 - a) Standard:
 - b) At site conditions and within cubicle:
- 3.6 Maximum temperature rise over ambient:
- 3.7 Short time current for 1 Sec. (KA rms):
- 3.8 Minimum clearance from bare bus bar connection
 - a) Phase to phase (mm):
 - b) Phase to Earth (mm):
- 3.9 Bus Bar provided with
 - a) Insulation Sleeve:

- b) Phase barriers:
 - c) Cast Resin shrouds for joints:
- 3.10 Bus bar connection
 - a) Silver Plated:
 - b) Made with anti-oxide grease:
- 3.11 Bus Bar support spacing (mm):
- 3.12 Bus support insulators
 - a) Make:
 - b) Type:
 - c) Reference Standard:
 - d) Voltage Class (KV):
 - e) Minimum creepage distance (mm):
 - f) Cantilever strength Kg/mm²:
 - g) Net Weight (Kg):
- 3.13 SF₆ gas pressure (filling pressure at 20 deg. C):

4.0 Vacuum CIRCUIT BREAKER:

- 4.1 Make:
- 4.2 Type:
- 4.3 Reference Standard:
- 4.4 Rated Voltage:
- 4.5 Rated Frequency:
- 4.6 No. of Poles:
- 4.7 Rated Current
 - a) Normal (Standard) Amps:
 - b) Rated (Site) Amps:
- 4.8 Maximum temperatures rise over ambient.(deg. C):
- 4.9 Rated operating Duty:
- 4.10 Rupturing capacity at rated voltage (MVA):
- 4.11 Breaking Capacity at rated voltage & operating duty
 - a) Symmetrical (KA rms):
 - b) Asymmetrical (KA rms):
- 4.12 Rated making current (KA peak)
- 4.13
 - a) Short time current for 1 Sec.(KA rms):
 - b) Short time current for 3 Sec.(KA rms):
- 4.14 Transient Recovery Voltage:
 - a) Rate of rise (KV/ms):
 - b) Peak Voltage (KV):
- 4.15 Insulation Level
 - a) Impulse Voltage with stand on 1/50 full wave:
 - b) 1 minute 50Hz voltage withstand:
- 4.16 Maximum over voltage factor when switching off:
- 4.17 Opening time Maximum No load condition (ms):
- 4.18 Opening and closing time under SF₆ gas loss or vacuum loss condition (ms):
- 4.19 At 100% Breaking capacity:
 - a) Opening time max (ms):
 - b) Arcing time max (ms):
 - c) Total break time (ms):
- 4.20 At 60% Breaking capacity
 - a) Opening time max (ms):
 - b) Arcing time max (ms):
 - c) Total break time (ms):
- 4.21 At 30% Breaking capacity:
 - a) Opening time max (ms):
 - b) Arcing time max (ms):
 - c) Total break time (ms):
- 4.22 At 10% Breaking capacity
 - a) Opening time max (ms):

- b) Arcing time max (ms):
 - c) Total break time (ms):
- 4.23 a) Make time (max)(ms):
 - b) Total closing time (ms):
- 4.24 Number of breaks per pole:
- 4.25 Total length of breaks per pole (mm):
- 4.26 Total length of contact travel (mm):
- 4.27 Speed of break (100% Short Circuit Current) m/sec:
- 4.28 Rate of Contact travel
 - a) At tripping M/sec.:
 - b) At closing M/sec.:
- 4.29 No of breaker operations permissible without requiring inspection replacement of contacts and other main parts.
 - a) At 100% rated current:
 - b) At 100% rated breaking current:
- 4.30 Type of contacts
 - a) Main:
 - b) Arcing:
- 4.31 Material of contacts
 - a) Main:
 - b) Arching:
 - c) Whether contacts silver plated:
 - d) Thickness of silver plating:
- 4.32 Contact pressure at no load:
- 4.33 Type of arc control device provided:
- 4.34 Operating mechanism- closing
 - a) Type:
 - b) No of breaker operations stored:
 - C) Trip free or fixed trip:
 - d) Anti pumping features provided:
 - e) Earthing for operating mechanism and metal parts furnished:
 - f) Earth terminal size and material:
- 4.35 Operating mechanism- tripping
 - a) Type:
 - b) No of breaker operations stored:
 - c) Trip free or fixed trip (V):
 - d) Anti pumping features provided (%):
 - e) Earthing for operating mechanism and metal parts furnished:
 - f) Earth terminal size and material:
- 4.36 Spring charging mechanism
 - a) Make:
 - b) Type:
 - c) Size:
 - d) Rating:
- 4.37 Tripping coil
 - a) Voltage:
 - b) Permissible voltage variation (%):
 - c) Tripping current at rated voltage (A):
 - d) Power at rated voltage (W):
 - e) 3-Over current trip and 1-earth fault furnished as specified:
- 4.38 Breaker /Accessories such as control switch indication Lamps etc. furnished as specified
 :(please attach separate sheet giving details of all accessories, inter locks and safety shutters)
 - a) Mechanical safety Interlock:
 - b) Automatic Safety Interlock:
 - c) Operational Interlock:
 - d) Emergency manual trip:
 - e) Operation counter:
 - f) Charge /discharge indicator:

g) Manual spring charging facility:

4.39 Impact load foundation design (to include dead load plus impact value On opening at maximum interrupting rating) (KG)

5.0 ISOLATORS:

5.1 Make:

5.2 Type:

5.3 Reference standard:

5.4 Rated voltage (KV):

5.5 Rated Frequency HZ:

5.6 No. Of poles (No):

5.7 Rated current

a) Normal (Standard) Amps:

b) De-rated (site) Amp:

5.8 Maximum temperature rise over ambient Deg. C:

5.9 Rated operation duty:

5.10 Rupturing Capacity at rated voltage MVA:

5.11 Rated making current KA peak:

5.12 Short time current

a) For 1 sec KA rms:

b) For 3 sec KA rms:

5.13 Impulse voltage withstand on 1/50 full wave:

5.14 Maximum over voltage factor when switching off

a) Loaded feeder cable:

5.15 Minimum SF6 Gas pressure required?

5.16 No of isolator operation permissible without requiring inspection, replacement of contacts and other main parts

At 100% rated current:

At 100% rated breaking current:

5.17 Isolator provided with the following:

Mechanical safety:

Mechanical ON, OFF, CABLE EARTH indicators:

Operation counter:

Manual spring charging facility:

6.0 CURRENT TRANSFORMER:

6.1 Make:

6.2 Type & voltage level:

6.3 Reference standard:

6.4 C.T. ratio as specified:

6.5 Rated frequency:

6.6 Short circuit withstand

a) Short time current for 1 sec. KA rms:

b) Short time current for 3 sec. KA rms:

c) Dynamic current KA peak:

6.7 Class of insulation:

6.8 Temperature rises over ambient. Deg. C:

6.9 Basic insulation level:

6.10 For tripping

6.11 Ratio:

6.12 Class of accuracy:

6.13 Rated Burden VA:

Technical Bid Checklist**Annexure-EEE**

Tender No.			
Bidder's Name :			
BEC / TENDER REQUIREMENTS		Compliance by Bidder	
SL. NO.		Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	Confirm that validity has been offered as per NIT.		
2	Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable) ?		
3	Confirm that you shall submit Performance security (in the event of placement of order) (Wherever Applicable) ?		
4	Confirm that duly signed Integrity Pact has been submitted as per NIT (Wherever Applicable) ?		
5	Confirm that you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)		
6	Confirm that you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.		
7	Confirm that the bid has been signed using Class 3 digital certificate with Organisation's Name as per NIT.		
8	Confirm that you have not taken any exception/deviations to the NIT .		

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (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 the purchase order cited above.

Response Sheet**Annexure-FFF**

Tender No.
Bidders Name

Bidders Response Sheet

SI No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Insurance charges have been included in your quoted prices	
4	Make of quoted Product	
5	Offered Validity of Bid as per NIT	
6	Bid Security Submitted (if applicable)	
6	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
7	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
8	Integrity Pact Submitted (if applicable)	
9	Whether you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)	
10	Whether you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.	
11	Delivery Period in weeks from placement of order	
12	Complied to Payment terms of NIT (if applicable) otherwise to Standard Payment Terms of OIL or not.	
13	If bidder is MSE whether you have quoted your own product	
14	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager	

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (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

**(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.