

**OIL INDIA LIMITED**  
(A Government of India Enterprise)  
P.O. Duliajan - 786602, Assam, India  
FAX: 91-0374-2800533; E-mail : [material@oilindia.in](mailto: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](http://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.** : SDI5364P15 DT: 12.11.2014

**Tender Fee** : Rs 1,000.00

**Bid Security Amount** : Rs 25,000.00

**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 LT PANEL 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 executing of supply installation & commissioning of LT Panel Rs 07.56 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 25.20 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](http://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.

<b><u>Criteria</u></b>	<b>Complied / Not Complied. (Remarks if any)</b>
<p><b>1.0 BID REJECTION CRITERIA (BRC):</b></p> <p>The bids must conform to the specifications and terms &amp; 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 &amp; 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><b><u>A. COMMERCIAL:</u></b></p> <p>i). Bid security:</p> <p>The bid must be accompanied by Bid Security of <b>Rs 25,000.00</b> 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. <b>The Bank Guarantee towards Bid Security shall be valid for 10 months from Bid closing date. (i.e. upto 08.11.2015).</b></p> <p><b>Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.</b></p> <p><b>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.</b></p> <p>For exemption for submission of Bid Security, please refer Clause No. 8.8</p>	

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

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

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

**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) The manufactured product should be strictly as per OIL's tender specification.

### **B) COMMERCIAL:**

i). To evaluate the inter-se-ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Govt. of Assam guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their offer.

ii). To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

### **NOTE:**

**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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**TECHNICAL SPECIFICATIONS WITH QUANTITY****Tender No & Date: SDI5364P15 DT: 12.11.2014**

	<b>Complied / Not Complied. (Remarks if any)</b>
<p><b><u>ITEM NO. 10</u></b></p> <p><b><u>SUPPLY INSTALLATION AND COMMISSIONING OF LT PANEL – QTY=01 NOS</u></b></p> <p><b><u>A) General Specification for LT Panel:</u></b></p> <p>The panel should have following features.</p> <ol style="list-style-type: none"> <li>1) Panel shall be indoor, industrial, cubicle type with provision of extension of panels in future.</li> <li>2) Panel shall be built on Self supporting, floor mounting, industrial type rigid framework.</li> <li>3) Panel shall be sheet steel clad made of 14 SWG MS CRCA sheets and built upon suitably sized MS angle iron frame work.</li> <li>4) Panel must be dust / vermin proof and weatherproof with IP 54 degree of protection.</li> <li>5) Panel must be designed for ambient of 45 Deg.C.(Max)and 5 Deg.C.(Min) and Humidity-95% (Max).</li> <li>6) Bottom detachable gland plates made from 3 mm thick MS CR sheet must be provided for all cable entries.</li> <li>7) Unless specified all the cable entry / exit shall be at the bottom of the panel.</li> <li>8) The entire metal work must be given seven tanks anti corrosion treatment and then powder coated. Colour- DA GREY.</li> <li>9) Special non-deteriorating Neoprene rubber gaskets must be provided between all joints.</li> <li>10) All feeders shall be suitable for operation from front side and must have provision of inspection from backside.</li> <li>11) All panel doors shall be provided with single turn latches for opening / closing.</li> <li>12) Internal barriers shall be provided between cubicles to provide Form-2 separation as per IEC to prevent transmission of flashover from one panel to other panels.</li> <li>13) Danger plates must be fitted on front and back of the panel.</li> <li>14) Legend plates of the feeders and starters shall be provided in the front as well as at back of each feeder/panel.</li> <li>15) Adequate nos. of lifting lugs / hooks must be provided on top.</li> <li>16) Ventilation louvers must be guarded with wire mesh.</li> <li>17) Separate terminal blocks are provided for control and power wiring. Power terminal blocks shall be rated at minimum of 90 Deg. C. Terminal Blocks should be clearly marked at both inputs and outputs.</li> <li>18) All non current carrying metallic parts shall be grounded. All the equipment having earthing terminal shall be grounded with suitably rated, PVC insulated, flexible copper earth wires or copper braids of suitable rating as per IS - 3043.</li> <li>19) Earthing bus must be provided at bottom of the panel. Earthing Bus must be made of 50 x 6 mm GI straps with 80 micron galvanisation thickness. Brought out studs must be provided on two sides complete with suitably sized zinc passivated double nuts and spring washers. Earth bus must have holes drilled for connection with main earth electrodes and earth cable/ strap of outgoing feeders.</li> </ol>	



- 20) Legend "LT POWER PANEL" in appropriate size must be provided at the top centre of the panel.
- 21) Each of the outgoing feeders must have Earth Leakage Protection with separate CBCT & ELR. EL current Range: 0-1A, adjustable in preferred steps of 50/100mA. Trip Time Range: 0-1s, adjustable in preferred steps of 50/100ms.
- 22) All outgoing MCCB feeders should have Pad locking arrangement for safety & sealing purposes.

## **B) TECHNICAL SPECIFICATIONS OF LT PANEL**

### **D) THE PANEL SHOULD HAVE THREE DISTINCT SECTIONS AS BELOW.**

**1. Incomer & Bus coupler section:** consisting of 4 nos. 1000A LT ACBs complete with all controls, protection and metering. These LT ACBs will be used as (a) LT Incomer-1 from Station Transformer - 1, (b) LT Bus Coupler, (c) LT Incomer-2 from Station Transformer - 2, (d) LT Incomer - 3 from Emergency DG Set.

**2. Outgoing feeder section-1:** on the left side of incomer section. This will consists of total 10 nos. draw out type outgoing MCCB feeders. Outgoing feeders shall be (a) 315A MCCB feeder - 2 nos. (b) 160A MCCB feeder - 2 nos. (c) 63 A MCCB Feeder - 6 nos.

**3. Outgoing feeder section-2:** on the right side of incomer section. This will consists of total 10 nos. draw out type outgoing MCCB feeders. Outgoing feeders shall be (a) 315A MCCB feeder - 2 nos. (b) 160A MCCB feeder - 2 nos. (c) 63 A MCCB Feeder - 6 nos.

**II) INCOMERS & BUS COUPLER:** Four nos. 1000 Amps, 4 pole 415V (Ue), 600V (Ui), 65 kA or above breaking capacity rated electrically operated Draw-out type Air circuit breaker, with microprocessor based release for over current, short-circuit and ground fault protection with distinct fault indication shall be used as incomers. The ACBs shall conform to IS/IEC 60947-2 / IS 13947-2, tropicalized to Class-II (high humidity); breaking capacity minimum 65 KA at rated service voltage; the overload (long time), short circuit (short time) and earth fault current settings shall be selectable including individual time settings. Each ACB incomer panels shall be fitted with 1 digital multifunction meter, 1 analog voltmeter (Size - 90mm x 90mm), 1 analog Ammeter (Size - 90mm x 90mm) with selector switch, LED indication lamps for R Y B "ON" status, suitable CTs, TNC switch, fuse etc.

Make of ACBs: Schneider (Masterpact NW series) / GE (Entelliguard series) / Siemens (3WL series) / ABB (SACE Emax series)/ L&T (U-Power OMEGA series) / or higher versions/series of these companies.

The Bus Coupler ACB Panel shall be fitted with a suitable Check-Synch Relay. The Check-Synch Relay is for checking the electrical synchronising conditions of the supply at the both ends of the bus coupler. Bus-Coupler ACB closing shall be linked with the Check-Synch relay. Bus coupler ACB shall close only when (a) Electrical Supply at the both ends is in synchronous condition (b) any of the Bus-Coupler ends is Dead (No Supply)

These four ACB panels shall have legends as given below.

- a) Incomer ACB : Station Transformer - 1
- b) Bus Coupler ACB
- c) Incomer ACB : Station Transformer - 2
- d) Incomer ACB : Emergency DG Set

### **III) BUS CHAMBER**

1. The bus chamber must be sheet steel clad having front and rear bolted covers and shall consist of 1 set TP & N electrolytic grade, IACS 99.9% conductivity, rectangular section, electro-tinned copper bus bars, conforming to IS: 613. Current rating of bus bar sections must be minimum 1500 Amps, suitable for 600 V AC, 50 Hz system. Neutral bar must be of same size as phase bus.
2. The bus-bar must be insulated with heat shrinkable PVC sleeves and must be supported at required intervals with non- hygroscopic, non-deteriorating, and non-inflammable SMC / FRP supports having adequate mechanical strength and a high tracking resistance, to withstand short circuit fault levels up to 70 kA for 1 sec.
3. The bus-bar individual phases shall be colour coded for easy identification. Main bus-bars shall be full length of the panel. Vertically dropped buses from the main bus shall power individual feeder panels. Vertical bus-bars shall also be full vertical length of the panel. Sufficient clearance shall be maintained in the bus chamber for proper cooling of the bus-bar. Bus-bar should be extendible type to facilitate addition of cubicles and switches in future.
4. All risers and connections from bus bar must be done with same material as the main bus bars of current rating as per rating of individual cubicle switch. To suit the stringent site conditions, the bus bar system must be designed with generous clearance between phases than specified in the standards. Adequate non-hygroscopic insulating sheet barriers between the bus chambers and feeders must be provided.
5. The manufacturer of the panel must have CPRI test certificate and temperature rise certificate for bus bar fault level of 70kA. A copy of the CPRI test certificate shall be enclosed with the offer.

### **IV) OUTGOING FEEDERS**

- 1) 4 nos. of 315Amps, Four Pole(TPN), draw-out type MCCB with breaking capacity minimum 50 kA with adjustable OL protection from 0.4 X In. Out of these four feeders, two nos. shall be on the Outgoing feeder section-1(On the left side of the incomer section) and other two nos. shall be on the Outgoing feeder section-2(On the right side of the incomer section).

All these MCCB feeders shall have following protections,

- i) Short Circuit protection (4In to 10In)
- ii) Adjustable overload (OL) protection (from 0.4xIn) & earth fault (EF) protection through inbuilt electronic trip unit in MCCB
- iii) Earth-leakage protection through separate CBCT & ELR. EL current Range: 30mA - 1A, adjustable in preferred steps of 50/100mA. Trip Time Range: 0-1s, adjustable in preferred steps of 50/100ms. The relay must have indication LEDs, test push button and reset push button and shall be duly wired up to trip MCCB in case of earth leakage.

- 2) 4 nos. of 160Amps, Four Pole(TPN), draw-out type MCCB with breaking capacity minimum 50 kA with adjustable OL protection from 0.4 X In. as outgoing feeders for the following. Out of these four feeders, two nos. shall be on the Outgoing feeder section-1(On the left side of the incomer section) and other two nos. shall be on the Outgoing feeder section-2(On the right side of the incomer section).

All these MCCB feeders shall have following protections,

- i) Short Circuit protection (4In to 10In).
- ii) Adjustable OL protection (from 0.4xIn) & EF protection through inbuilt electronic trip unit in MCCB.
- iii) Earth-leakage protection through separate CBCT & ELR. EL current Range: 30mA - 1A, adjustable in preferred steps of 50/100mA. Trip Time Range: 0-1s, adjustable in preferred steps of 50/100ms. The relay must have indication LEDs, test push button and reset push button and shall be duly wired up to trip MCCB in case of earth leakage.

3) 12 nos. of 63 Amps, TPN, draw-out type MCCB with breaking capacity minimum 36 kA with adjustable OL protection from 0.4 X In. as outgoing feeders for the followings. Out of these twelve feeders, six nos. shall be on the Outgoing feeder section-1(On the left side of the incomer section) and other six nos. shall be on the Outgoing feeder section-2(On the right side of the incomer section).

All the MCCB feeders shall have following protections,

- i) Short Circuit protection (4In to 10In).
- ii) Adjustable OL protection (from 0.4xIn) & EF protection through inbuilt electronic trip unit in MCCB.
- iii) Earth-leakage protection through separate CBCT & ELR. EL current Range: 30mA - 1A, adjustable in preferred steps of 50/100mA. Trip Time Range: 0-1s, adjustable in preferred steps of 50/100ms. The relay must have indication LEDs, test push button and reset push button and shall be duly wired up to trip MCCB in case of earth leakage.

#### **V) GENERAL SPECIFICATIONS FOR OUTGOING FEEDERS:**

All the MCCBs shall comprise following features for total safety of installation and operating personnel.

- 1) Line-Load Reversibility: to allow line or load connections from top or bottom terminals without any risk of unsafe operation or protection performance of MCCB.
- 2) High Endurance Level: to allow prolonged and un-interrupted use of product.
- 3) Thermal-Magnetic Trip Unit: Offered MCCBs shall have Thermal-Magnetic Trip Unit for protection against Overload and Short-Circuit faults, respectively.
- 4) Test-Trip button: MCCBs shall have a 'Push to Trip' test button on front face to test healthiness of Trip unit.
- 5) ON-OFF-Trip Position marking : MCCBs shall have well defined and identified ON, OFF, & Trip positions marked on front face of the MCCB in accordance with Indian and International standards.
- 6) Phase Barriers: Phase Barriers shall be provided on MCCBs to prevent travel of arc between phases during any short circuit fault, and for maximum insulation between phases at power terminals.
- 7) Accessories: Offered MCCBs shall have provision for mounting internal and/or external

accessories like Auxiliary Contact, etc.

8) Ease of Identification: Basic technical parameters, i.e. rating, operating voltage, breaking capacity, etc. shall be identified on front face of MCCB.

9) Degree of Protection: Bare MCCB shall have minimum IP20 degree of protection.

10) Compliance to Environmental Protection & Tropicalisation : MCCBs shall have compliance to Environmental Protection, and Tropicalisation Standards for performance under extreme atmospheric conditions.

11) Mechanical Environment: MCCBS used in the system shall be able to withstand stringent mechanical environment conditions like vibration and shock tests.

12) Ambient: MCCBs shall be suitable for use between -5 to 50°C temperature conditions. However, for temperature higher than 40°C ambient, suitable de-rating should be done on the rating of MCCB.

13) Rated Insulation Voltage for all the MCCBs shall be 690V

14) Utilisation category for all the MCCBs : Category - A

#### **VI) METERING:**

The LT Panel should have following metering:

1) Analog Voltmeter with selector switch on all the 3 nos. ACB incomer panels. Voltmeter is not required on Bus Coupler Panel.

Make : AE/Secure/Rishabh,

Meter Size : 96mm X 96mm

Accuracy : 0.5

Voltage range : 0 - 500V

Total Qty : 03 nos.

2) Analog Ammeter with selector switch on all the 3 nos. ACB incomer panels complete with required CTs.

Make : AE/Secure/Rishabh

Meter Size : 96mm X 96mm

Accuracy : 0.5

Current range : 0 - 1000A

Total Qty : 03 nos.

3) Panel mounted 3 phase 4 wire digital Multifunction meter having features of reading maximum, minimum and average value, suitable for balanced/unbalanced load, with LCD (Back-Lit) display & with minimum 3 line simultaneous display to be provided on all the 3 nos. ACB incomer panels, to measure minimum following parameters:

(i) Active/Reactive/Apparent Power

(ii) Active /Reactive/Apparent Energy

(iii) Frequency

(iv) Line Current

(v) Power Factor

(vi) Phase Voltage

(vii)THD

Model: Meter should be equivalent / better than Model - 'RISH Master 3480 - 3 - 110 - D - R - D - 2' of Rishabh Instruments Pvt. Ltd., Nashik, India.

Make : Rishabh / Schneider / AE

Minimum Display Size : 96mm X 96mm

Display Type : Graphical LCD Display having Resolution: Minimum 320 x 240

Accuracy : Voltage/Current/Active Power/Re-Active Power/Active Energy (KWh)/Re Active Energy (KVARh) / Apparent Energy (kVAh) : +/- 0.5% of range; Frequency : +/- 0.15%, Power factor: +/- 1% of Unity, THD: +/- 1%.

Total Qty. : 03 nos.

4) Digital Ammeter on all the 315A outgoing feeders.

Make : AE/Secure/Rishabh / Schneider or equivalent

Accuracy : +/- 0.5%

Resolution : Minimum 0.1 Ampere

Total Qty : 04 nos

Make : AE / Secure / Rishabh / Schneider,

#### **VII) INDICATION LAMPS:**

Suitably Coloured LED indication lamps to be provided for the indication of power availability (Red, Yellow, Blue), ACB and MCCB status ( ON, OFF, TRIP, Spring Charge, Test & Service etc.) in all incomer and outgoing feeders as per standard requirement.

Designation name plate (for identification) of all individual indication lamps shall also be provided.

Make of LED indication lamp: Binay/Teknic/Siemens/ESBEE.

#### **VIII) PANEL WIRING:**

1) All internal wiring and cabling inside the panels should be done with 1.1 KV grade fire retardant PVC insulated tinned copper multi-stranded flexible cables with proper lugs. All wires and cable should have proper ferrule numbers for easy identification.

2) Ring lugs should be used at all critical connections such as CT connections. No more than two wires or lugs may be attached under any one screw. All control & CT wiring should be terminated on suitable TBs. All terminal strips to have minimum 2 nos. spare terminals to accommodate any modification required during commissioning / operation. All terminal strips should be accessible for testing and troubleshooting/maintenance.

3) All control wiring inside the panels should be done with single core, flame retardant multi-stranded flexible copper PVC insulated (1100 V) wire, 1.5 mm<sup>2</sup> for potential circuits and 2.5 mm<sup>2</sup> for current circuits. Control wires should be properly identified with ferrule numbers and suitably terminated with proper sized lugs; cable make- Finolex/Havells/Henley/Nicco/Reputed brand.

**IX) MECHANICAL LOCKING SYSTEM OF ACBs:** As already mentioned, there will be total 3 nos. incomers in the panel. Two nos. from two station transformers (11KV/400V) and one no. from emergency DG set. However, during operation power supply to the panel

shall be either from transformers or from emergency DG set. DG set is for emergency purpose only and will never be synchronized with transformers.

To prevent accidental closing of DG set ACB (which will normally remain open) when other incomers are closed or vice versa, there should be a mechanical inter locking system between ACBs to ensure following two points

- (a) Transformer ACBs cannot be closed when DG set ACB is close
- (b) DG set ACB cannot be closed when any of the Transformer ACB is closed.

**X) MISC. COMMISSIONING ITEMS:** All the items required for installation & commissioning of the panel like Cable Termination Kits, Cable Termination Lugs and Cable Gland etc. shall be supplied by the contractor. OIL shall provide only the cables both at the incomer and outgoing side.

Along with other items party should supply total 12 sets of indoor type, Heat Shrinkable end termination kit for 3.5 Core, 1100 Volt grade, 400Sq.mm XLPE armoured cables (Incomer Cables). Make of the termination Kits: Raychem/Heat shrink/ Xicon

#### **XI) INSPECTION:**

- 1) Inspection and Testing of the panel as per our technical specification and applicable Indian Standard shall be carried out in presence of OIL's Engineer at manufacturer's works.
- 2) The Supplier shall give intimation to OIL at least 15 days in advance prior to commencement of the tests so that OIL can depute representative for witnessing tests in time.
- 3) Panel should be despatched only after the written clearance from OIL after the inspection & testing of the panel at the manufacturer's works.
- 4) Materials / equipments failed to conform to the specifications during testing, OIL's representatives 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 cost.

#### **XII) Special Terms and Conditions**

- A)
- 1) Offer should be complete in all respect to meet the technical specifications as per NIT.
  - 2) List of deviations from NIT specifications taken by the bidder in the offer, if any along with justifications shall be provided by the bidder.
  - 3) Bid shall be complete with supply and installation & commissioning of the panel. Bids only for supply of the panel will not be considered for evaluation.
  - 4) The Bidder should be an electrical panel manufacturer or authorized dealer of reputed panel manufacturer. Authorized dealer have to submit copy of valid dealership certificate along with the bid.
  - 5) Experience/Credential: Bidder should have experience of supplying and successfully erecting & commissioning similar works (minimum one panel) with any State Govt / Central Govt / PSUs in last three years as on bid closing date.  
Similar works means fabrication / manufacturing of LT/HT electrical panels (with minimum 4 nos. 1000A or higher rated ACB / VCB as incomer / outgoing feeders along with other panel components), testing of LT/HT electrical panels as per relevant Indian / International Standard and installation & commissioning of LT/HT panels.

As documentary evidences in support of experience/credential bidder have to submit purchase order with invoice along with detailed scope of work and completion certificate.

<p>B)</p> <ol style="list-style-type: none"> <li>Bidder should submit following drawings for evaluation of the bid. <ol style="list-style-type: none"> <li>Detailed electrical schematic diagram of the panel</li> <li>Tentative assembly drawing showing different compartments/ sections etc. along with dimensions.</li> </ol> </li> <li>Bidder should submit a complete bill of quantity for various items / components considered for manufacturing the panel indicating make and model of the items.</li> <li>Copy of Electrical Supervising License of the electrical supervisor to be deputed for commissioning works at site shall be submitted along with the bid.</li> <li>Bid will be evaluated considering both material price together with price of installation &amp; commissioning quoted by the bidder.</li> </ol> <p><b>XIII). DRAWINGS:</b></p> <p>(a) <u>To be submitted within 30 days after issuance of purchase order</u> : The successful bidder shall furnish two prints each of the following drawings for approval from OIL.</p> <ol style="list-style-type: none"> <li>Complete assembly drawing of the panel, showing plan, elevation, sectional views and location of terminal blocks, cable entry details.</li> <li>Control and wiring diagram of the LT panel.</li> <li>Foundation plan showing location of channels, foundation bolts etc.</li> <li>Complete Schematic diagram of the panel showing all components.</li> <li>List of LEGEND plates to be fixed on the panel.</li> </ol> <p>(b) <u>To be supplied along with the panel</u>: 3 Sets of approved drawings both in hard copy and soft copy (CD) shall be submitted along with the delivery of the LT panel.</p>	
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**NOTE:**

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

**Bidder should provide along with the bid the following data sheet (Annexure - I) duly filled and supported by suitable documents / literatures / technical leaflet of various components. In this data sheet, as far as possible bidder shall provide only one make & model of items/components which will be supplied by him, if order is placed.**

**ANNEXURE- I**

**DATA SHEET**  
(To be filled up by the bidder)

**A) LT Switchgear Panel**

1. Name of Panel manufacturer:
2. Panel type:
3. Degree of protection:
4. Thickness & other details of Steel Sheet to be used in the panel :
5. Conforms to (Standards):
  - a) IEC :
  - b) BIS :
  - c) Others :
6. Rated Insulation:
  - a) Max. withstand voltage :
  - b) Impulse voltage withstand (dry) :
7. General details of Panels
  - a) Extensible : Yes/No.
  - b) Compartmentalized : Yes/No
  - c) No. of compartments : (To be specified)
  - d) Names of the compartments: (To be specified)
8. Material of internal partitions:
9. Busbars
  - a) Busbar material :
  - b) Busbar shape :
  - c) Busbar size :
  - d) Busbar insulation :
  - e) Busbar rating (Amps) :
  - f) Busbar Short Circuit Fault Level :
  - g) Busbar Spouts insulation material :
  - h) Busbar Test certificate:
  - i) Busbar support insulation Type & materials :

**B. INCOMER & BUS COUPLER SECTION**

- 1) ACB Details
  - a) Number of Poles :
  - b) Rated voltage :
  - c) Rated normal current :
  - d) Rated breaking capacity :
  - e) Make & Model of ACB :



- 2) Details of Indication Lamps :
- 3) Voltmeter details :
- 4) Selector Switch details :
- 5) Ammeter details :
- 6) CT, PT details :
- 7) Ammeter selector switch details:
- 8) Details of Multifunction Meter:  
(Make, model and specifications etc.)
- 9) Space Heater details:
- 10) Earth Leakage Relay Details:
- 11) Details of other related accessories:

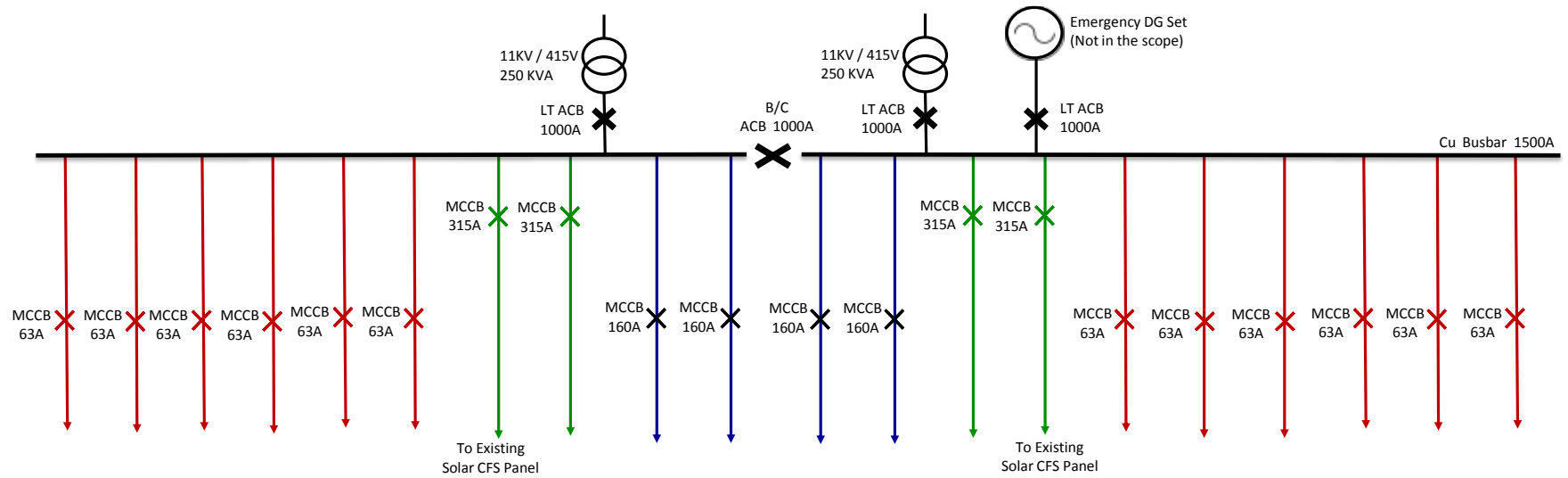
### **C. OUTGOING FEEDER SECTIONS**

- 1) Make and Model & specifications of MCCBS
  - a) 315A MCCBs :
  - b) 160A MCCBs :
  - c) 63A MCCBs :
- 2) ON/OFF/TRIP Indication Lamp Details:
- 3) Earth Leakage Relay with CBCT Details:
- 4) Digital ammeter and CT Details:
- 5) Space Heater Details :
- 6) Details of other related accessories :

### **D. CONTROL CABLES :**

- a) Make :
- b) Voltage Grade :
- c) Insulation :
- d) Conductor Material :
- e) Size (Sq. mm. per core):

Single Line Diagram of new LT system  
Moran Power Station



**Bidders Response Sheet****Annexure-FFF**

<b>Tender No.</b>	
<b>Bidders Name</b>	

<b>Sl No.</b>	<b>Description</b>	<b>Remarks</b>
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**

<b>Tender No.</b>			
<b>Bidder's Name :</b>			
		<b>Compliance by Bidder</b>	
<b>SL. NO.</b>	<b>BEC / TENDER REQUIREMENTS</b>	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.