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
SDI1401P17 Dt. 10.06.2016 Single Stage Composite Bid System	**14.07.2016**	**ENTERPRISE PROJECT MANAGEMENT SOFTWARE**
SDI0749P16 Dt. 31.03.2016 Single Stage Composite Bid System	**14.07.2016**	**FLP FITTINGS**
SDI0629P16 Dt. 18.03.2016 Single Stage Composite Bid System	**14.07.2016**	**STEEL TUBULAR POLE**
SDI1420P17 Dt. 10.06.2016 Single Stage Composite Bid System	**14.07.2016**	**FIRE WATER MONITOR**
SDI1418P17 Dt. 10.06.2016 Single Stage Composite Bid System	**14.07.2016**	**HIGH VOLUME LONG RANGE MONITOR (HVLRM)**
SDI1323P17 Dt. 03.06.2016 Single Stage Composite Bid System	**14.07.2016**	**WATER TANK**
SDI1363P17 Dt. 07.06.2016 Single Stage Two Bid System	**14.07.2016**	**PMCC PANEL**
SDI1438P17 Dt. 13.06.2016 Single Stage Composite Bid System	**14.07.2016**	**HIGH MAST**
SDI1439P17 Dt. 13.06.2016 Single Stage Composite Bid System	**14.07.2016**	**LT PANELS**
SDI1440P17 Dt. 13.06.2016 Single Stage Two Bid System	**14.07.2016**	**HDPE LINING**
SDI1376P17 Dt. 07.06.2016 Single Stage Two Bid System	**14.07.2016**	**62.5 KVA GENERATING SET**

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. : **SDI1363P17 DT: 07.06.2016**

Tender Fee : **Rs 1,000.00**

Bid Security : **Applicable**

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

Tender Type : **Open Tender**

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

Performance Security : **Applicable**

Integrity Pact : **Applicable**

OIL invites Bids for **SUPPLY, INSTALLATION AND COMMISIONING OF PMCC PANEL – QTY = 02 NOS** through its e-Procurement site under **SINGLE STAGE TWO 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 = 0374-2807171 , 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) Bidder should have experience of successfully executing atleast 1 (one) similar order for Rs. 47.09 Lakhs. in preceding 5 (five) years. Similar Order: "Similar order" is defined as- Experience in design, engineering, manufacturing, testing, supply, installation and commissioning of MCC/PMCC panels in any Central Govt./Govt. PSU/Public Limited Companies executed by the bidder or their OEM during last 5 years to be reckoned from the original stipulated bid closing date of the tender. To support the above point the following documentary evidence shall be furnished with the offer such as valid dealership/authorization certificate, copy of purchase order with excise invoice copy/ performance certificate/completion certificate/ commissioning report/tax invoice/delivery challan etc. related to supply and commissioning of panels and other necessary details like test certificates etc.	
b) Annual financial turnover of the firm in any of the preceding 3 financial years should not be less than Rs. 47.09 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.

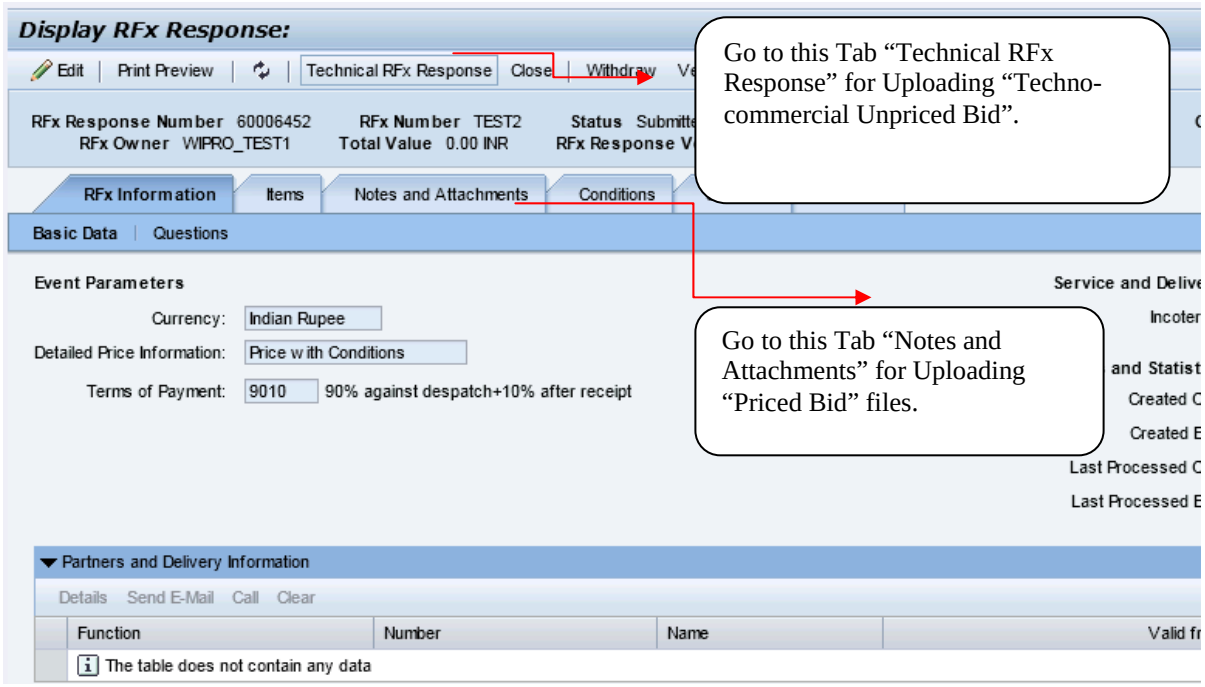
NOTE:
In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they shall apply to DGM-Materials, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of Tender Fee upto one week prior to the Bid closing date (or as amended in e-portal).

3.0 The tender is invited under SINGLE STAGE-TWO 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.

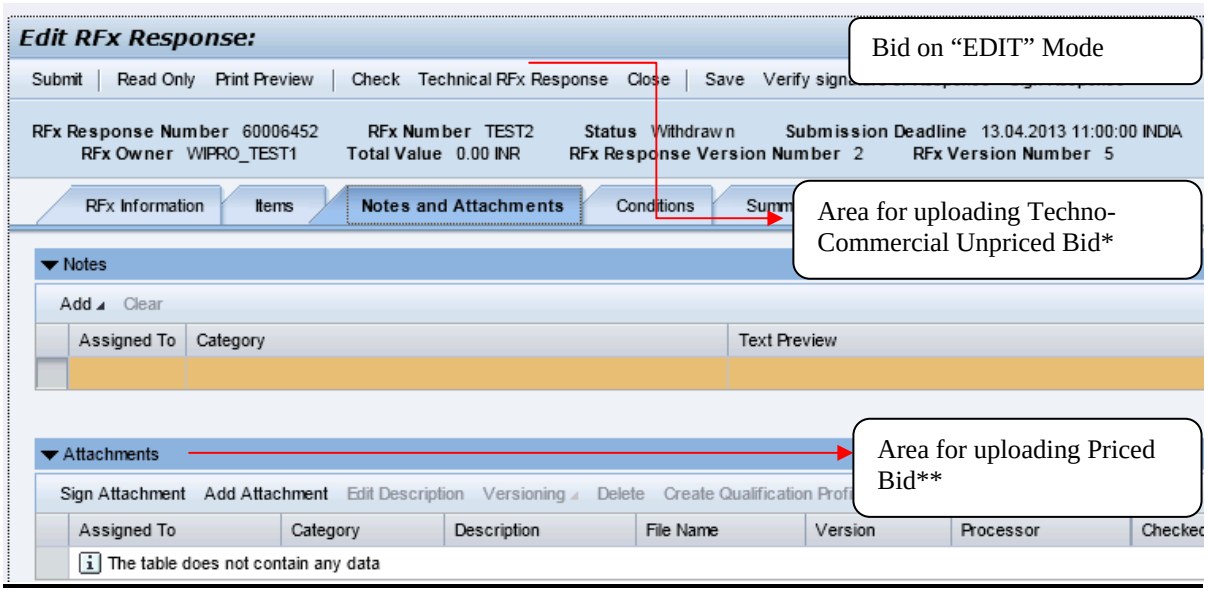
3.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> User - > Technical Bid only**.** The "**TECHNO-COMMERCIAL UNPRICED BID**" shall contain all techno-commercial details **except the prices**. **Please note that no price details should be uploaded in** Technical RFx Response**.**

3.2 The "**PRICE BID**" must contain the price schedule and the bidder's commercial terms and conditions.**The prices of the items should be quoted in "Conditions Tab". Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".**

3.3 A screen shot in this regard is given below. Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in Annexure-CCC.



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Techno-Commercial Unpriced Bid" and "Priced Bid" in the places as indicated above:



Note :

* The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details **except the prices**.

** The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser

window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.

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 though 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 **SINGLE STAGE TWO BID SYSTEM** shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.

10.0 **a) The Integrity Pact is applicable against this tender. Therefore, please submit the Integrity Pact document duly signed along with your quotation as per BRC. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be submitted by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.**

b) The name of the OIL's Independent External Monitors at present are as under:

SHRI RAJIV MATHUR, IPS (Retd.)
Former Director, IB, Govt. of India,
e-Mail ID : rajivmathur23@gmail.com

11.0 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.

12.0 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.

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

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

NOTE:

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

Yours Faithfully

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

Annexure - CCC

Tender No & Date: SDI1363P17 DT: 07.06.2016

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.

Criteria	Complied / Not Complied. (Remarks if any)
1.0 BID REJECTION CRITERIA (BRC): **A) TECHNICAL:** 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. **B) COMMERCIAL:** i) Validity of the bid shall be minimum 120 days from the Bid Closing Date. ii) Bid security: The bid must be accompanied by Bid Security of **Rs 1,88,500.00** 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 7 months from Bid closing date. (i.e. upto 14.02.2017). 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** **Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.** **If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid**	

submitted through electronic form will be rejected without any further consideration.

For exemption for submission of Bid Security, please refer Clause No. 8.16 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 Two 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. Any offer not complying with the above shall be rejected straightway.

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) Technical RFx Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RFx Response folder, otherwise the offer will be rejected.

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

x). Integrity Pact :

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be submitted by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.

xi). 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) In case the Party refuses to sign Integrity Pact.
(e) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.
xii) Bidder should categorically confirm in the technical bid of delivery of the item within ten (10) months after receipt of formal order failing which the offer will be rejected and Two (2) months for installation & commissioning after site clearance.
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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:

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) Priced bids of only those bidders will be opened whose offers are found technically acceptable. The technically acceptable bidders will be informed before opening of the "priced bid".

iii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.

iv) 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.

v) All items will be procured from the same source and evaluation will be done accordingly.

NOTE:

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

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ANNEXURE-IA

TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI1363P17 DT: 07.06.2016

	Complied / Not Complied. (Remarks if any)
ITEM NO. 10 . QTY = 01 NOS Design, Engineering & Manufacture, Supply, Installation, Testing and Commissioning of 2 nos. 415 V, 3 phase, TP, 50 Hz PMCC panels at Hebeda Oil Collecting Station of Oil India Limited at Hebeda village under Lankashi Police Station, Dist. Tinsukia, Assam, for supplying electrical power to air compressors and various other motors and loads from generator house, A. GENERAL DESCRIPTION OF PANEL B. DETAILED DESCRIPTION OF PANEL C. DRAWING AND DOCUMENTS D. GUARANTEE E. TESTING AND INSPECTION F. SPARES G. GENERAL NOTES H. TECHNICAL CHECK LIST I. SCOPE OF SUPPLY J. SCOPE OF INSTALLATION AND COMMISSIOINING K. ANNEXURE- PANEL FEEDER LISTS Both the panels shall be similar in construction, except the quantities and capacity of incomers/outgoing feeders and starters and size. Details of individual panels for the installations are as per Annexure- Panel Feeder Lists. System basic design data: Rated Service Voltage# 690 V Rated operational voltage# 415 V Max# Min. ambient temp# 40/5 deg. Celsius Humidity# 98% Max. Altitude# 100 m above MSL A. General Description of Panel: a) Panel shall be single front, extensible type, sheet steel clad, self-supporting and floor mounted with integral base channel, cubicle type, indoor, dust and vermin protected. It shall contain copper bus bars (both horizontal main and vertical feeder) and individual motor starter/feeder cubicles suitable for operation from front side. Frames shall be made from suitably sized rigid framework of steel formed angles and channels and 2 mm thick CRCA sheet steel. Cubicles shall have individual front doors with sturdy hinges and fitted with special non-deteriorating neoprene gasket. Lifting lugs shall be provided on the top of panel. b) Panel including busbar shall be suitable for future horizontal expansion on both sides. Busbars and cubicles/side walls of the panel shall be manufactured accordingly. c) Panel shall have horizontal main busbars (of ratings as given for individual panel details in	

the Annexure- Panel Feeder Lists) with alternate vertical busbar and cable alleys for proper distribution of panels.
d) A 50 x 6mm GI strip should be provided on the backside of the panel with adequate holes (13mm dia each) with nuts, bolts and washers for making earth connections for all panels and cables. Length of GI strip shall be same as panel length. Zinc plated and passivated double earthing studs with nuts, bolts and washers shall be provided on the earthing strips.
e) The PMCC panel shall be thoroughly cleaned and chemically pre-treated for rust/grease removal and phosphate coating in a minimum seven tank chemical treatment process. After chemical treatment, the panel shall be powder coated/polished with epoxy resin based powder and stoved in a stoving oven. Coating (dry film) thickness shall be 50 micron minimum as per IS: 13871-2006. Finish shall be glossy.
f) Colour of the PMCC panel shall be light grey to IS: 5 of 2007.
g)The complete PMCC panel shall be based on a 75x40 mm channel with suitable grouting arrangement.
h) Danger plates (415 VAC) shall be fixed on both front and rear of panel including the busbar chambers.
i) Panel and its components shall be conforming to IS: 8623, 8828, 13947 and 12640 & IEC: 60439-1. Protection shall be as per IP-54. Ambient-40°C (Max)/ 5°C (Min), Humidity-95% (Max).
j) All components used must be suitable for the environment as mentioned. All hardware should be of high tensile steel &galvanised/ Zinc passivated. Size of spring washers & flat washers should be as per relevant IS for individual bolt.

Panel can also be of modular design, with withdrawable type cubicles. In case of drawout type cubicles, the matching parts (male/female) in both power and control circuit shall be of high accuracy and quality for perfect insertion. The withdrawable units must be designed for easy insertion and withdrawal. Component layout shall be designed for maximum heat dissipation. Cable alleys shall be provided for incoming and outgoing cables with labeled terminal blocks and fixing arrangement of cables.

Limiting dimensions of the PMCC panel are 4000 mm (width) x 700 mm (depth/thickness) x 2300 mm (height). However, minor deviation regarding size can be accepted after discussion with OIL.

B. Detailed Description of the Panels

a) Incomers:

There will be 2 (two) incomers, with 415V (Ue), 630 A, 690V (Ui), 50 kA or above breaking capacity rated three pole fixed type moulded case circuit breaker, (microprocessor controlled) with adjustable settings [long delay (0.4-1.0 In)/short delay (1.5-10 long delay setting)/ground fault (0.1-1.0 In) with individual time settings] with separate earth leakage module. Incomer minimum rating will be 630 A rated. Earth leakage module shall have range of 0.03-3.0 Amps and 0- 3 seconds, both current and time in adjustable steps. The earth leakage protective device may be either in-built earth leakage trip module, a CBCT + EL module combination (for MCCBs) or a separate, but MCCB mountable ELR module. The MCCBs shall conform to IEC60947-2/IS 13947-2, tropicalized to Class-II (high humidity). Make and models of the incomer panel MCCBs are as given in the Annexure- Panel Feeder Lists.

All incoming and outgoing terminals of MCCB shall be fitted with spreader links supplied by MCCB manufacturer or brought out phase links of copper in rectangular sections with hole.

Zinc passivated nuts and bolts with flat and spring washers for connection shall be provided for cable termination (2 or 3nos. of 3.5x240 sq mm LT PVCA copper cable for incoming supply for each incomer, depending on incomer current rating). The links shall be supported on non-hygroscopic insulating bars of FRP/DMC based materials and shall be of suitable size for cable termination. The vertical distance between the centre of connection hole in the links for cable connection and the bottom gland plate shall be minimum 450 mm. Detachable gland plate shall be provided which shall be suitable for fixing two/three nos. of cable glands of the size mentioned.

Metering/ Instrumentation for the Incomer (two sets, one set for each incomer):
1) 01 no.- Digital multifunction meter indicating Voltage, Current, Frequency, Power factor, Power and Energy with RS-485 capability; make- Swift-Encore/Siemens/HPL-Socomec/Merlin Gerin (Schneider). The multi-function meter shall also have function for maximum demand (maximum demand indicator).
2)03nos.- Current transformers, wire wound, 1000/5, 15 VA, Class 1 to IS: 2705; make- AE/Kappa/Siemens
3) 08 nos.- LED indication lamps for indication of 'Supply ON' (for R/Y/B phases), 'CB Off/CB On/Trip-OC/Trip-SC/Trip-EF'; make- Teknik/Siemens/Schneider/ABB
4) As required- Moulded HRC fuse holders with suitably rated fuse links for control circuit and instrument circuit protection; make- GE/Schneider/Bussman
5) MCBs- Min. 'C' curve for circuit/meter protection

b) Busbars and bus chamber:

Bus chamber shall be steel clad having front and rear bolted covers. The busbars shall consist of 1 set of hard drawn, high conductivity, three phase, electrolytic grade, virgin copper bars of purity 99.99% or better, rated minimum 1250 Amps, supported at sufficient intervals on non-hygroscopic, non-inflammable glass reinforced plastic (GRP)/sheet moulding compound (SMC) supports. Busbars shall be rated to withstand short circuit fault currents of 50 KA for 1 second. The busbar individual phases shall be colour coded for easy identification. Main busbars shall be full length of the panel. Vertical bus bars for feeding individual starter/feeder shall be full height of the panel. Sufficient clearance shall be maintained in the bus chamber for proper cooling of the busbar. Busbar should be extensible type to facilitate future extension.

c) Starter/Feeder Panels:
No. and ratings of Starters/feeders will be as per individual panel outgoing details, given in Annexure- Panel Feeder Lists. However general description for these shall be as follows.
Description of Starter/feeder panels:

1) MCCB isolator (Isolation requirement):
a) Each motor starter shall be provided with one no. 415V(Ue), 600V(Ui), min. 36/50 kA breaking capacity, three pole MCCB fitted with adjustable thermal and adjustable magnetic overload & short-circuit releases with extended Rotary Handle operating mechanism.
b) For feeder panels also, three pole MCCBs shall be used with identical capacity and type as the motor starter cubicles.
The MCCBs shall be operated from outside the panel. The MCCB handles shall also project outside the panel doors enabling breaker operation from outside the panel. All MCCB used shall be suitable for positive isolation requirement as per IEC 947-2. Control supply of individual starters may be tapped from its own line through a small transformer; the starter shall be in-operative if the MCCB is off. Alternative to tapping control supply for individual starter panels from its own line, low voltage power supply to panel contactors and intrinsically safe

barrier power requirement (explained in next paragraph) may be generated through two nos. step down transformers placed at both ends of the panel.

2) Panel components:
Various components like MCCBs (as isolators), contactors, timers, overload relays, earth leakage devices etc. for starters and feeders shall be housed in individual cubicles. Components shall be mounted on sheet steel base and all apparatus shall be suitable for front removal. All starters/feeders shall have suitably rated MCCBs as incomers. For feeder/starters above and including 20 HP, MCCB incomer connection to busbars shall be through suitably rated copper bus links/spreader bars only. This is to avoid mechanical stresses that may develop during short circuit condition.
Motor starters above and including 12.5 HP shall be star-delta starters (except soft starters). Starters below 12.5 HP shall be DOL starting.

Earth leakage module shall have range of 0.03#3.0 Amps and 0# 3 seconds, both current and time in adjustable steps. The earth leakage protective device may either be in#built earth leakage trip module (in case of larger MCCBs), a CBCT + EL module combination (for MCCBs) or a separate, but MCCB mountable EL module. Starter panel components like MCCBs, contactors, overload relays, RCBOs etc. shall conform to IEC60947#2/IS: 13947#2 and IS: 12640. All starter/feeders shall be provided with Type II protection.

The control voltage of remote push button stations for motors is to be limited to maximum 30 V phase-to-phase (as no neutral will be used), as per CEA Regulations, 2010. Therefore, an intrinsically safe barrier (ISB) shall beplaced between the remote pushbutton station and motor starter panel, so that no dangerous voltage (for hazardous area) is transmitted for operation of the remote pushbutton station. The intrinsically safe barrier may be placed in the motor starter cubicle.

Low voltage for cubicle control power and ISB power supply may be generated through individual step down control transformer for each cubicle. These transformers shall have MCBs/fuses in the primary and secondary side for protection and isolation.
Alternatively, the low voltage may be generated through two nos. step down transformers placed at both ends of the panel. The low voltage secondary side of the transformers shall be connected to an auxiliary bus. Control voltage shall be tapped to individual motor starter panels from the auxiliary bus through auxiliary MCBs/control fuses in each starter panel.
Control voltage transformers feeding to the auxiliary control bus shall have individual MCBs of sufficient ratings as breakers in both primary and secondary sides (individual for each transformer). Each of the transformers shall be able to take the entire control voltage load of the panel. One of the transformers shall be on line and the other shall be standby.
[As supply source (captive gensets) shall be installed with NGRs, the neutral cannot be used anywhere in the system. Hence all control voltages will be referred to phase#phase only.]

Starter panel components like MCCBs, contactors, overload relays, RCBOs etc. shall conform to IEC60947-2/IS: 13947-2 and IS: 12640. All starter/feeders shall be provided with Type II protection.

Main components of individual starter/feeder panels (other than main panel incomers):

Starter panel components (including soft starter panels) Feeder panel components
• Cubicle incomer MCCB (as isolator/main switch)
• CBCT+ELCB combination or earth leakage module

• Magnetic contactors (for DOL or SD starters) • Soft starter (only for soft starter panels) • Fast acting semi-conductor fuse for soft starter Type II protection • Starting and Run/Bypass contactors (only for soft starter panels) • Thermal overload relay • Timer for star delta starter, range 0-60 seconds, adjustable in steps/continuous • Control supply voltage transformer (if individual cubicle supply is provided) • Remote/local selector switch • Local on/off (start/stop) pushbuttons • Intrinsic safety barrier for the remote control system • Ammeter (digital, accuracy class 1.0) • CT, where required • Control MCBs and/or fuse holder/base • LED indication lamps for motor on/off/trip status • Incomer MCCB • CBCT+ELCB combination or earth leakage module • Ammeter (digital,accuracy class 1.0 through CT) • LED indication lamps for feeder on/off/trip status Soft starter panels# Individual soft starter cubicles shall have individual soft starter units. The soft starter shall have protection against short circuit, overload, locked rotor, phase imbalance/phase reversal, torque control, single phasing protection etc. Other components such as cubicle incomer MCCB, earth leakage protectionwith the MCCB, main (starting) contactor, running (or soft starter bypass) contactor, thermal overload relay, remote/local selector switch, start/stop pushbuttons, LED indications,intrinsically safe barriers etc. shall be as in the normal star/delta or DOL starterpanels. Name of component Make Model /Rating Main panel incomer MCCB with minimum LSIG Protection (630 A range) (where MCCB as incomer is mentioned) Schneider Electric (Compact NSX with Micrologic 6.0 and above)/ Legrand (Model DPX/DPX3 range with electronic LSIG release-Sg type)/ Siemens (Sentron VL with ETU 45 LSIG) /ABB (Tmax T6 with PR 222)/Indo-Asian (X TEC series with X5/X6 LSIG release)/HPL/L & T (MTX 2.0 with LSIG) Digital multifunction meter Swift-Encore (Swift Encore SW3)/ Siemens (PAC 3100)/ HPL-Socomec (Diris A40)/Schneider (EM 6400 accuracy 0.5) MCCB (for individual cubicles) with adjustable thermal (min. 0.8-1x In) and adjustable magnetic (min. 6-10x Ir) Protection and with add-on type earth leakage module (if provided instead of separate CBCT+ELR combination) Schneider Electric (Compact NSX range) /Legrand (DPX3 range)/Siemens (Sentron 3VT series)/ ABB (Tmax series)/Indo-Asian (X-TEC series)/ HPL/L & T (‘D-Sine’ range) RCBO Schneider Electric/Legrand/Siemens/GIC/Prok-DV (Microprocessor based) CBCT+ELR combination Schneider Electric (RH 197P+GA300 etc.)/ Legrand (0260 88+ 0260xx series)/GIC /Prok-DVs Magnetic contactor (for DOL or SD starters) Schneider Electric (TeSys series)/Siemens (3RT series)/ ABB (AXX series)/L & T (MNX series)	

Soft starter ABB/Siemens/Schneider Starting and Bypass contactors (only for soft starter panels) Schneider Electric/Siemens/ABB Fast acting semi-conductor fuse ABB/Siemens/Schneider Thermal overload relay Schneider Electric/Siemens/ABB/ L& T Timer Schneider Electric/Siemens/ABB/Indo-Asian/L & T Remote/local selector switch Siemens/L&T/Kaycee/Teknik/ABB Local on/off (start/stop) PBS Kaycee/L&T/Recom Intrinsic safety barrier for the remote control system (remote PBS) Omega/R-Stahl/ MTL/ Pepperl+Fuchs Ammeter (digital) AE/Rishabh/L & T/Schneider Control supply transformer AE/Kappa/Siemens/reputed make CT, where required AE/Kappa/Siemens (Wire wound, 1000/5, 15 VA, Class 1 to IS: 2705) LED indication lamps for on/off/trip status L&T/BCH/ Teknik/Siemens/ Schneider/ ABB/Binay (As per voltage rating, all with LVGP) Control MCBs Schneider/Legrand/ABB/ Siemens/Indo-Asian (‘C’ Curve) Fuse/fuse holder GE/ Schneider/Bussman Important points to be considered while designing the starter/feeder panels: i) As the panel will be installed in an oil/gas mine, as per Central Electricity Authority Regulations 2010, the remote starting facility of starter panels for motors shall be suitable for voltage below 30 Volt and intrinsically safe. ii) All MCCBs shall have provision for padlocking and shall be provided with suitable locks with three keys for each lock. iii) MCCBs, contactors, overload relays shall be preferably of one make only. However, earth leakage relays, CBCT etc. may be of different make than contactors/OLR etc. CBCT and sensing earth leakage relay shall be compatible and from the same manufacturer. iv) One rating of components shall be used for a range of starters (e.g., one rating of contactors in all starters up to 20 HP, but suitable range of overload relay to match the panel rating). All device selection shall take motor starting current into consideration. v) For hazardous areas, 3 phase 3 wire connection shall be used including lighting loads (through lighting transformer). However, in case 3 phase, 4 wire supply (for neutral) is required, power from the 3 pole feeder will be supplied through isolation transformer (415 V/415 V, delta/star-neutral) only. Such feeders (capacity 100 A each) shall be accommodated in each PMCC panel (as per panel list given below). vi) Outgoing cables/bus links from the individual panels shall be terminated in individual TBs mounted in cable alleys. TBs will be sufficiently rated. Separate control and power TBs are to be used. TBs shall be covered/separated with insulation barriers. Also, barriers will be provided between adjacent TBs of separate panels. vii) 1 (one) cubicle box with three phase 63 A RCBO as incomer and 12 nos. DP MCBs (suitably rated) for illumination and power socket outlets for the panel installation area shall also be separately provided. This cubicle box will be a stand-alone type panel. Incoming power to the cubicle will be from lighting transformer, as the lighting for the entire installation will be phase to phase 240 V and will be supplied from the lighting transformers. One such cubicle is to be supplied with each panel. The cubicle box shall be suitable for floor mounting on a sturdy MS frame. 3) Panel wiring: i) All internal wiring and cabling inside the MCC starter panels shall be done with 1.1 KV grade fire retardant PVC insulated tinned copper multi-stranded flexible cables with proper lugs. All	

wires and cable shall have proper ferrule numbers for easy identification.
ii) Ring lugs shall 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 shall be accessible for testing and troubleshooting/maintenance.
iii) All control wiring inside the panels shall be done with single core, fire retardant multi-stranded flexible copper PVC insulated (1100 V) wire, 1.5 mm2 for potential circuits and 2.5 mm2 for current circuits. Control wires shall be properly identified with ferrule numbers and suitably terminated with proper sized lugs; cable make- Finolex/Havells/Henley/Nicco/Reputed brand.

4) Features of the Panel:

i) Thickness of gland plates shall be minimum 3.0 mm. Gland plates shall be removable and provided with sufficient knockouts; knockout sizes shall match individual panel outgoing cable size (which can be found out from panel capacity). Suitable SS/brass material, NiCd plated single compression cable glands shall be provided in the panels. Gland sizes shall be provided by OIL during detailed engineering/drawing approval.
ii) The panel doors shall have door latches suitable for latching in one turn only. Lifting hooks shall be provided.
iii) Special non-deteriorating Neoprene rubber gaskets shall be used in doors and as and where required.
iv) All MCCB Operating handles shall be accessible for operation without opening the cubicle door. The handles will be interlocked with doors, i.e., unless MCCB is in OFF position, door cannot be opened.
v) Adequate insulated barriers between the bus chamber and feeder shall be provided to achieve Form-2 separation as per IEC 439-1.
vi) MCCB incoming terminals are to be provided with insulating barrier so that once the door is opened, no live part is exposed.
vii) Suitable cable supporting arrangement shall be provided inside the cable alleys to firmly grip the cables connected to the terminal blocks of the outgoing feeders.The cable alleys will house sufficiently rated TBs. The cable alleys and vertical busbars shall be on either side of the panels.
viii) All motor starters and feeder cubicles will have solid copper links from busbar to the MCCB. All feeders shall have solid copper links from MCCB outgoing side to cable alley TBs. Current rating of links shall be minimum 1.5 times (rating for unassembled sections) the switch rating. All joints shall be checked for proper contact area.
ix) Wiring cables from panel to door shall be protected with heavy duty PVC spiral binding.
x) All the hardware should be of high tensile steel duly zinc passivated for corrosion protection & fitted with proper sized heavy duty spring washer & two nos. heavy duty flat washers.
xi) Sufficient space should be provided for proper glanding, dressing, connecting up and maintenance of cables. Adequate space should be provided for connecting the cable leads to the terminal blocks.
xii) All hinged doors shall be earthed with copper flexible loops / braids as per IS-3043.
xiii) A 50 x 6mm GI strip shall be provided with adequate holes (13mm dia each) with nut, bolts and washers for making earth connections for all panels and armours/screens of cables. Length of GI strip shall be same as panel length. The panel GI strap shall have provision with fasteners for connection to external earth electrodes with suitably sized GI strap.

Important: All MCCBs shall be mounted vertically. Even if the MCCBs have to be mounted

horizontally due to design of feeders, the door mounted handle shall have proper position same as in panels having vertically mounted MCCBs, so that there is no confusion in operating the handle. Suitable bus links/spreader bars to incoming/outgoing sides of MCCBs shall be provided as and where required.

C. Drawings and Documents:

1. The following documents are required to be submitted with the offer.
(i) Confirmation that the offered board shall conform to all the points of the tender. Any deviation from the tender specs must be clearly mentioned with technical justifications. In case of an order on the party complete tender specs and the deviations accepted by OIL in writing shall only be mentioned in the order.
(ii) Copy of test certificate for busbar rated 1000 Amps or above for fault level of 50kA for 1 second from CPRI or any govt. approved NABL accredited test laboratory.
(iii) Copy of test certificate for panels with Degree of Protection IP: 54 from CPRI or any govt. approved NABL accredited test laboratory
(iv) Indicative general arrangement and layout drawing of the panel
(v) Indicative schematic and single line diagram of the panel
(vi) Quality Management Certification ISO : 9001 # 2008 version for Design, manufacture, installation and servicing of medium voltage Electrical control and distribution panels.
(vii) Credentials of bidder having minimum 05 (five) years (till the bid closing date) experience in design, fabrication and testing of LT PMCC Electrical Panels. During these years bidder must have manufactured and supplied minimum 2 nos. of panels to Govt./semi-govt./PSUs/Public limited companies. These panels must be in operation satisfactorily as on date.
(viii) Credentials of Bidder having minimum seven tank anti rust treatment system and powder coating facility for treatment and painting of sheet metal works for durability. Tank sequence: degreasing, water rinse, de-rusting, water rinse, activation, phosphating, water rinse, passivation.
(ix) Indicative bill of materials with offered spares list and prices of spares
(x) Filled up technical check list
(xi) General Quality Assurance Plan of the manufacturing process of the OEM

2. Detail foundation drawing, drawing of panel showing termination details, full wiring diagram, component layout diagram and complete bill of material must be submitted to OIL for approval within 30 days after placement of the order. OIL shall modify/correct drawings as necessary. The manufacturing of panels shall start only after approval of the drawings by OIL. In the event of an order on the party complete tender specifications and the deviations accepted by OIL in writing only shall be mentioned in the order.
3. Supplier shall also submit detailed ordered panel-specific Quality Assurance Plan for the panels for OIL's approval within 30 days after placement of order. Inspection and testing details of each and every component shall be elaborately given in the QAP.
4. Six spiral bound sets of the following documents, drawings and literatures are to be supplied with the panels, for each panel:
(i) General arrangement, foundation, schematic diagram and wiring diagrams ("as built")
(ii) Works Test report containing result of tests done at factory during inspection
(iii) Guarantee Certificate
(iv) Technical Catalogues/manuals of Air circuit breakers, Moulded Case Circuit Breakers, soft starter units, starter components and Digital Meters
(v) Bill of Materials with part description, part nos. and details of items/components

D. Guarantee:
The LT panel and all parts must be guaranteed with all its components for a period of 12 months after commissioning. Party will arrange for repair/ replacement, as required by OIL, of defective parts within one month of reporting of the failure by OIL. This will be at no extra cost to OIL.

E. Testing and Inspection:
Panel shall be duly tested as per IS: 8623 at manufacturer's works and routine test certificate shall be submitted at the time of pre-despatch inspection.

In addition to the routine tests as per IS, OIL representative shall carry out pre-despatch inspection of the panel and witness all necessary testing at manufacturer's works. Bidders shall separately quote charges towards inspection and witness test, if any. [To and fro charges of OIL's personnel to manufacturer's works will be to OIL's account].

Panel shall be tested as per the following details for witness testing by OIL's representative:
(i) Accuracy of dimensions & circuitry as per approved drawings. Joints of busbar and links shall be checked for proper contact area.
(ii) Inspection of the assembly including inspection of wiring and mechanical/electrical operation of components and starters/feeders
(iii) Dielectric (insulation) tests
(iv) Checking of protective measures and of the electrical continuity of the protective circuit
(v) Secondary Injection test for Incomer breakers

Any alteration/modification requirements pointed out during the inspection shall be carried out by the manufacturer at no extra cost to OIL and confirmed before dispatch, without which dispatch clearance shall not be given. In case routine test parameters are found to be outside acceptable values, modifications shall be carried out and routine tests on the panel shall again be performed with no extra cost to OIL.
Copies of the test certificates along with bound copies of complete test results (after acceptance) shall be submitted for approval of OIL prior to dispatch of the PMCC.

F. Spares:

Bidder shall also include in their scope of supply the operational spares for the panelcomponents with their offer for panels. The quantities of the spares for the panels shallbe as follows. The spares will be exact replacement with the full rating, make and modelof the units fitted in the panel.

List of minimum indicative spares (total nos., to be supplied with the panels as per OILapproved Bill of Materials):

a) Main panel Incomer MCCB (630 A)– 01 (one) no.
b) All other outgoing feeder/starter panel MCCBs# 02 (two) nos. of each rating (400/250/100 A)
c) Soft starter- 01 (one) no.
d) High speed semiconductor fuse for soft starter- 12 (twelve) nos.
e) Intrinsic safety barrier for PBS #4 (four) nos. of each rating
f) Contactors# 12 (twelve) nos. of each rating/size (for 100 HP soft starters, 40/30/20HP SDS & 10 HP DOL starters)
g) Overload relays#12 (twelve) nos. of each rating/size (# do #)

h) MCCB mounted ELR unit- 04 nos. of each rating/size/type (if provided)
i) CBCT# 02 (two) nos. of each rating/size/type (if provided)
j) ELR (in conjunction with CBCT) #04 (four) nos. of each rating/size/type (if provided)
k) Ammeters and CTs# 03 (three) nos. of each rating and size
l) Remote local selector switch and local start/stop switch# 03 (three) nos. of each rating/size/type
m) ON/OFF/OVERLOAD/Other types LED indication lamps with low voltage glow protection# 12 (twelve) nos. each colour/type
n) One set of operating tools required to operate/maintain all the items installed in the panel like box wrench set, screw driver set etc. Standard electrician's tool kits from reputed firms like RS#Components, Stanley etc. are to be supplied.

If felt necessary, bidder may include further items in the above spares list and quote the prices for these accordingly.
Prices of the spares to be included in the main item. However, the spare price to be shown separately under notes & attachment of Price Bidand these will be included for priceevaluation/comparison of the bids. In the event of an order, final list of spares to besupplied shall be approved by OIL, after drawing approval.

G. General Notes:

1. Material should be adequately packed to avoid damage and ingress of water during transit. OIL's PO no. and date shall be embossed/engraved on the panel.
2. All items of the offered panel must be as per IS / IEC (with latest amendments).
3. All feeders shall have engraved designation nameplates. Details of Feeder designation shall be provided by OIL at the time of approval of drawing.
4. Works Test Certificate for routine tests as per IS: 8623 (with calibrated testing equipment) and wiring diagrams shall be submitted to OIL at the time of pre-despatch inspection. Manufacturer's Routine Test certificate of incomer breakers is also to be furnished at the same time.

H. TECHNICAL CHECK LIST

The check list must be completed and returned with the offer with bidder's comment as per format detailed below. Bidder is to ensure that all the following points are covered in the offer. This will ensure proper evaluation of the offer.
Sl. No. Points Remarks (Yes/No/Agree)
1 Are you a panel manufacturer of 415 VAC PCC/MCC/PMCC panels with ACB/MCCB and channel partner/dealer of switchgear manufacturer or have you quoted on behalf of OEM of panels? Please note: Bidders quoting on behalf of OEM of panels has to submit valid authorization certificate from the OEM along with the offer, otherwise their offer may not be considered for evaluation.
2 Have you quoted for both (a) supply and (b) installation/ commissioning of the PMCC panels at OIL's designated site/s?
3 Have you submitted experience credentials for having successfully supplied at least 2 (two) nos. of PCC/MCC/PMCC panel with ACB/MCCBs to Central Govt./State Govt./ PSU/Public limited companies in the last 5 (five) years as on bid closing date?
4 Have you submitted type test certificates for the following tests for your designed and supplied PCC/MCC/PMCC panels as per IS: 8623 (with latest amendments) from a test house/ laboratory accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India.

(a) Short time current withstand test (50 kA for 1 second) (b) Ingress Protection up to IP 54 5 Have you quoted installation & commissioning charges separately? 5 Have you offered spares as per NIT along with the panels with prices? Please note that spares as per NIT list are mandatory and prices of spares will be used for evaluation of offer. 6 Have you submitted full technical specifications for the PMCC and accessories, indicative dimensional/GA and layout drawings of PMCC, indicative wiring diagram, QAP, Bill of Materials and datasheets of all the components used in the PMCC along with the quotation? 7 Do you agree for pre-despatch inspection? Please note that routine test certificates etc. are to be submitted at the time of final inspection, failing which dispatch clearance will not be given. 8 Have you offered guarantee for 12 (twelve) months from the date of commissioning for the offered panels? 9 Have you mentioned any deviations or other items/ points not indicated /included in the specifications but deemed necessary for design, Installation and commissioning, efficient control and operation of the PMCC? I. Scope of Supply 1. Complete panels with the specifications as mentioned in the detailed specifications of PO 2. Lighting cubicle box (one with each panel) 3. Commissioning spares- any left out spares shall be handed over to OIL. 4. Full sets of spares and tools as per OIL's approved list 5. "As-Built" drawings (Schematic and SLD), technical brochures & operation and maintenance manuals of all items, catalogues, test report etc. after final installation and commissioning, 06 (six) copies each. J. Scope of Installation and Commissioning: Supplier shall install and commission the PMCC panels in the designated installation of OIL. Supplier shall arrange for all manpower, tools and tackles, instruments etc. necessary for installation and commissioning of the PMCC panels. Jobs: 1. Installation and fixing (including cement grouting) of the supplied panels in the shed (Shed and trench/ foundation shall be constructed by OIL) 2. Connection of the incomer cables (supplied by OIL) to the PMCC incomer breaker (s) 3. Dismantling of the outgoing cables from old panels and connection (including jointing if required) to the new panels, including connection of the new cables if required (supplied by OIL). All cable lugs, terminals, ferrules, heat shrinkable cable jointing kits of proper size shall be supplied by the party. 4. Earthing of the panels as per IS: 3043, with GI straps and chemical earth electrodes (as per the specifications): 02 nos. for each panel's body/equipment earthing: All items shall be supplied by the party. Chemical earth electrode specs: Flat in pipe, flat size min. 65 mm, pipe size min. 85 mm, length of electrode: 3000 mm, with mineral backfill compound 2 nos. 20 kg bags per electrode. 5. Energization and testing of the panels- in no load condition 6. Testing of the panels in full load condition, including simulation of faults, with available loads 7. Any field modification jobs in the panel including wiring modification jobs 8. Submission of testing and commissioning reports and "As-built" drawings	

K. ITEM NO. 10: PMCC PANEL FOR GENERATOR HOUSE

SL. NO. INCOMER/STARTER/ FEEDER PANEL CAPACITY/ MOTOR LOAD (HP/A) QTY. (NO.) PANEL CAPACITY (HP) REMARKS

1 Incomer MCCB panel 630 A 2 -

2 Outgoing feeder panel 400 A 4 -

3 Outgoing feeder panel 250 A 2 -

4 Outgoing feeder panel 100 A 6 - 1 no. for lighting transformer
1 no. for isolation transformer

5 Outgoing starter panel 40 HP 4 40 HP Star- delta starters are to be used. All the starters shall have remote/ local selector, as these will be operated remotely with the push button stations near the load.

6 Outgoing starter panel 20 HP 4 20 HP

7 1 (one) cubicle box with double pole 63 A RCBO as incomer and 12 nos. DP MCBs (suitably rated) for illumination and power socket outlets of the shed shall be provided. One 20 A industrial metallic plug socket is to be arranged in the box itself. 63 A This cubicle box will be a stand-alone type panel. Incoming power to the cubicle will be from lighting transformer, as the lighting will be ph-ph 240 V.

All the above starters shall have remote/local selector, as these will be operated remotely with the push button stations near the load.

ITEM NO, 20 QTY = 01 NOS

Design, Engineering & Manufacture, Supply, Installation, Testing and Commissioning of 2 nos PMCC PANEL FOR Formation Water Disposal Pumps and other loads at FWD pump house.

A. GENERAL DESCRIPTION OF PANEL
B. DETAILED DESCRIPTION OF PANEL
C. DRAWING AND DOCUMENTS
D. GUARANTEE
E. TESTING AND INSPECTION
F. SPARES
G. GENERAL NOTES
H. TECHNICAL CHECK LIST
I. SCOPE OF SUPPLY
J. SCOPE OF INSTALLATION AND COMMISSIOINING
K. ANNEXURE- PANEL FEEDER LISTS

Both the panels shall be similar in construction, except the quantities and capacity of incomers/outgoing feeders and starters and size.
Details of individual panels for the installations are as per Annexure- Panel Feeder Lists.

System basic design data:
Rated Service Voltage# 690 V
Rated operational voltage# 415 V
Max# Min. ambient temp# 40/5 deg. Celsius
Humidity# 98% Max.
Altitude# 100 m above MSL

A. General Description of Panel:

a) Panel shall be single front, extensible type, sheet steel clad, self-supporting and floor mounted with integral base channel, cubicle type, indoor, dust and vermin protected. It shall contain copper bus bars (both horizontal main and vertical feeder) and individual motor starter/feeder cubicles suitable for operation from front side. Frames shall be made from suitably sized rigid framework of steel formed angles and channels and 2 mm thick CRCA sheet steel. Cubicles shall have individual front doors with sturdy hinges and fitted with special non-deteriorating neoprene gasket. Lifting lugs shall be provided on the top of panel.
b) Panel including busbar shall be suitable for future horizontal expansion on both sides. Busbars and cubicles/side walls of the panel shall be manufactured accordingly.
c) Panel shall have horizontal main busbars (of ratings as given for individual panel details in the Annexure- Panel Feeder Lists) with alternate vertical busbar and cable alleys for proper distribution of panels.
d) A 50 x 6mm GI strip should be provided on the backside of the panel with adequate holes (13mm dia each) with nuts, bolts and washers for making earth connections for all panels and cables. Length of GI strip shall be same as panel length. Zinc plated and passivated double earthing studs with nuts, bolts and washers shall be provided on the earthing strips.
e) The PMCC panel shall be thoroughly cleaned and chemically pre-treated for rust/grease removal and phosphate coating in a minimum seven tank chemical treatment process. After chemical treatment, the panel shall be powder coated/polished with epoxy resin based powder and stoved in a stoving oven. Coating (dry film) thickness shall be 50 micron minimum as per IS: 13871-2006. Finish shall be glossy.
f) Colour of the PMCC panel shall be light grey to IS: 5 of 2007.
g)The complete PMCC panel shall be based on a 75x40 mm channel with suitable grouting arrangement.
h) Danger plates (415 VAC) shall be fixed on both front and rear of panel including the busbar chambers.
i) Panel and its components shall be conforming to IS: 8623, 8828, 13947 and 12640 & IEC: 60439-1. Protection shall be as per IP-54. Ambient-40°C (Max)/ 5°C (Min), Humidity-95% (Max).
j) All components used must be suitable for the environment as mentioned. All hardware should be of high tensile steel &galvanised/ Zinc passivated. Size of spring washers & flat washers should be as per relevant IS for individual bolt.

Panel can also be of modular design, with withdrawable type cubicles. In case of drawout type cubicles, the matching parts (male/female) in both power and control circuit shall be of high accuracy and quality for perfect insertion. The withdrawable units must be designed for easy insertion and withdrawal. Component layout shall be designed for maximum heat dissipation. Cable alleys shall be provided for incoming and outgoing cables with labeled terminal blocks and fixing arrangement of cables.

Limiting dimensions of the PMCC panel are 4000 mm (width) x 700 mm (depth/thickness) x 2300 mm (height). However, minor deviation regarding size can be accepted after discussion with OIL.

B. Detailed Description of the Panels

a) Incomers:

There will be 2 (two) incomers, with 415V (Ue), 630 A, 690V (Ui), 50 kA or above breaking capacity rated three pole fixed type moulded case circuit breaker, (microprocessor controlled) with adjustable settings [long delay (0.4-1.0 In)/short delay (1.5-10 long delay setting)/ground fault (0.1-1.0 In) with individual time settings] with separate earth leakage module. Incomer minimum rating will be 630 A rated. Earth leakage module shall have range of 0.03-3.0 Amps and 0- 3 seconds, both current and time in adjustable steps. The earth leakage protective device may be either in-built earth leakage trip module, a CBCT + EL module combination (for MCCBs) or a separate, but MCCB mountable ELR module. The MCCBs shall conform to IEC60947-2/IS 13947-2, tropicalized to Class-II (high humidity). Make and models of the incomer panel MCCBs are as given in the Annexure- Panel Feeder Lists.

All incoming and outgoing terminals of MCCB shall be fitted with spreader links supplied by MCCB manufacturer or brought out phase links of copper in rectangular sections with hole. Zinc passivated nuts and bolts with flat and spring washers for connection shall be provided for cable termination (2 or 3nos. of 3.5x240 sq mm LT PVCA copper cable for incoming supply for each incomer, depending on incomer current rating). The links shall be supported on non-hygroscopic insulating bars of FRP/DMC based materials and shall be of suitable size for cable termination. The vertical distance between the centre of connection hole in the links for cable connection and the bottom gland plate shall be minimum 450 mm. Detachable gland plate shall be provided which shall be suitable for fixing two/three nos. of cable glands of the size mentioned.

Metering/ Instrumentation for the Incomer (two sets, one set for each incomer):
1) 01 no.- Digital multifunction meter indicating Voltage, Current, Frequency, Power factor, Power and Energy with RS-485 capability; make- Swift-Encore/Siemens/HPL-Socomec/Merlin Gerin (Schneider). The multi-function meter shall also have function for maximum demand (maximum demand indicator).
2)03nos.- Current transformers, wire wound, 1000/5, 15 VA, Class 1 to IS: 2705; make- AE/Kappa/Siemens
3) 08 nos.- LED indication lamps for indication of ‘Supply ON’ (for R/Y/B phases), ‘CB Off/CB On/Trip-OC/Trip-SC/Trip-EF’; make- Teknik/Siemens/Schneider/ABB
4) As required- Moulded HRC fuse holders with suitably rated fuse links for control circuit and instrument circuit protection; make- GE/Schneider/Bussman
5) MCBs- Min. ‘C’ curve for circuit/meter protection

b) Busbars and bus chamber:

Bus chamber shall be steel clad having front and rear bolted covers. The busbars shall consist of 1 set of hard drawn, high conductivity, three phase, electrolytic grade, virgin copper bars of purity 99.99% or better, rated minimum 1250 Amps, supported at sufficient intervals on non-hygroscopic, non-inflammable glass reinforced plastic (GRP)/sheet moulding compound (SMC) supports. Busbars shall be rated to withstand short circuit fault currents of 50 KA for 1 second. The busbar individual phases shall be colour coded for easy identification. Main busbars shall be full length of the panel. Vertical bus bars for feeding individual starter/feeder shall be full height of the panel. Sufficient clearance shall be maintained in the bus chamber for proper cooling of the busbar. Busbar should be extensible type to facilitate future extension.

c) Starter/Feeder Panels:
No. and ratings of Starters/feeders will be as per individual panel outgoing details, given in Annexure- Panel Feeder Lists. However general description for these shall be as follows.
Description of Starter/feeder panels:

1) MCCB isolator (Isolation requirement):
a) Each motor starter shall be provided with one no. 415V(Ue), 600V(Ui), min. 36/50 kA breaking capacity, three pole MCCB fitted with adjustable thermal and adjustable magnetic overload & short-circuit releases with extended Rotary Handle operating mechanism.
b) For feeder panels also, three pole MCCBs shall be used with identical capacity and type as the motor starter cubicles.
The MCCBs shall be operated from outside the panel. The MCCB handles shall also project outside the panel doors enabling breaker operation from outside the panel. All MCCB used shall be suitable for positive isolation requirement as per IEC 947-2. Control supply of individual starters may be tapped from its own line through a small transformer; the starter shall be in-operative if the MCCB is off. Alternative to tapping control supply for individual starter panels from its own line, low voltage power supply to panel contactors and intrinsically safe barrier power requirement (explained in next paragraph) may be generated through two nos. step down transformers placed at both ends of the panel.

2) Panel components:
Various components like MCCBs (as isolators), contactors, timers, overload relays, earth leakage devices etc. for starters and feeders shall be housed in individual cubicles. Components shall be mounted on sheet steel base and all apparatus shall be suitable for front removal. All starters/feeders shall have suitably rated MCCBs as incomers. For feeder/starters above and including 20 HP, MCCB incomer connection to busbars shall be through suitably rated copper bus links/spreader bars only. This is to avoid mechanical stresses that may develop during short circuit condition.
Motor starters above and including 12.5 HP shall be star-delta starters (except soft starters). Starters below 12.5 HP shall be DOL starting.

Earth leakage module shall have range of 0.03#3.0 Amps and 0# 3 seconds, both current and time in adjustable steps. The earth leakage protective device may either be in#built earth leakage trip module (in case of larger MCCBs), a CBCT + EL module combination (for MCCBs) or a separate, but MCCB mountable EL module. Starter panel components like MCCBs, contactors, overload relays, RCBOs etc. shall conform to IEC60947#2/IS: 13947#2 and IS: 12640. All starter/feeders shall be provided with Type II protection.

The control voltage of remote push button stations for motors is to be limited to maximum 30 V phase-to-phase (as no neutral will be used), as per CEA Regulations, 2010. Therefore, an intrinsically safe barrier (ISB) shall beplaced between the remote pushbutton station and motor starter panel, so that no dangerous voltage (for hazardous area) is transmitted for operation of the remote pushbutton station. The intrinsically safe barrier may be placed in the motor starter cubicle.

Low voltage for cubicle control power and ISB power supply may be generated through individual step down control transformer for each cubicle. These transformers shall have MCBs/fuses in the primary and secondary side for protection and isolation.
Alternatively, the low voltage may be generated through two nos. step down transformers placed at both ends of the panel. The low voltage secondary side of the transformers shall be connected to an auxiliary bus. Control voltage shall be tapped to individual motor starter panels from the auxiliary bus through auxiliary MCBs/control fuses in each starter panel.
Control voltage transformers feeding to the auxiliary control bus shall have individual MCBs of sufficient ratings as breakers in both primary and secondary sides (individual for each transformer). Each of the transformers shall be able to take the entire control voltage load of the

panel. One of the transformers shall be on line and the other shall be standby.
[As supply source (captive gensets) shall be installed with NGRs, the neutral cannot be used anywhere in the system. Hence all control voltages will be referred to phase#phase only.]

Starter panel components like MCCBs, contactors, overload relays, RCBOs etc. shall conform to IEC60947-2/IS: 13947-2 and IS: 12640. All starter/feeders shall be provided with Type II protection.

Main components of individual starter/feeder panels (other than main panel incomers):

Starter panel components (including soft starter panels) Feeder panel components
• Cubicle incomer MCCB (as isolator/main switch)
• CBCT+ELCB combination or earth leakage module
• Magnetic contactors (for DOL or SD starters)
• Soft starter (only for soft starter panels)
• Fast acting semi-conductor fuse for soft starter Type II protection
• Starting and Run/Bypass contactors (only for soft starter panels)
• Thermal overload relay
• Timer for star delta starter, range 0-60 seconds, adjustable in steps/continuous
• Control supply voltage transformer (if individual cubicle supply is provided)
• Remote/local selector switch
• Local on/off (start/stop) pushbuttons
• Intrinsic safety barrier for the remote control system
• Ammeter (digital, accuracy class 1.0)
• CT, where required
• Control MCBs and/or fuse holder/base
• LED indication lamps for motor on/off/trip status • Incomer MCCB
• CBCT+ELCB combination or earth leakage module
• Ammeter (digital,accuracy class 1.0 through CT)
• LED indication lamps for feeder on/off/trip status

Soft starter panels# Individual soft starter cubicles shall have individual soft starter units. The soft starter shall have protection against short circuit, overload, locked rotor, phase imbalance/phase reversal, torque control, single phasing protection etc. Other components such as cubicle incomer MCCB, earth leakage protectionwith the MCCB, main (starting) contactor, running (or soft starter bypass) contactor, thermal overload relay, remote/local selector switch, start/stop pushbuttons, LED indications,intrinsically safe barriers etc. shall be as in the normal star/delta or DOL starterpanels.

Name of component Make Model /Rating
Main panel incomer MCCB with minimum LSIG Protection (630 A range)
(where MCCB as incomer is mentioned) Schneider Electric (Compact NSX with Micrologic 6.0 and above)/ Legrand (Model DPX/DPX3 range with electronic LSIG release-Sg type)/ Siemens (Sentron VL with ETU 45 LSIG) /ABB (Tmax T6 with PR 222)/Indo-Asian (X TEC series with X5/X6 LSIG release)/HPL/L & T (MTX 2.0 with LSIG)

Digital multifunction meter Swift-Encore (Swift Encore SW3)/ Siemens (PAC 3100)/ HPL-Socomec (Diris A40)/Schneider (EM 6400 accuracy 0.5) MCCB (for individual cubicles) with adjustable thermal (min. 0.8-1x In) and adjustable magnetic (min. 6-10x Ir) Protection and with add-on type earth leakage module (if provided instead of separate CBCT+ELR combination) Schneider Electric (Compact NSX range) /Legrand (DPX3 range)/Siemens (Sentron 3VT series)/ ABB (Tmax series)/Indo-Asian (X-TEC series)/ HPL/L & T ('D-Sine' range) RCBO Schneider Electric/Legrand/Siemens/GIC/Prok-DV (Microprocessor based) CBCT+ELR combination Schneider Electric (RH 197P+GA300 etc.)/ Legrand (0260 88+ 0260xx series)/GIC /Prok-DVs Magnetic contactor (for DOL or SD starters) Schneider Electric (TeSys series)/Siemens (3RT series)/ ABB (AXX series)/L & T (MNX series) Soft starter ABB/Siemens/Schneider Starting and Bypass contactors (only for soft starter panels) Schneider Electric/Siemens/ABB Fast acting semi-conductor fuse ABB/Siemens/Schneider Thermal overload relay Schneider Electric/Siemens/ABB/ L& T Timer Schneider Electric/Siemens/ABB/Indo-Asian/L & T Remote/local selector switch Siemens/L&T/Kaycee/Teknik/ABB Local on/off (start/stop) PBS Kaycee/L&T/Recom Intrinsic safety barrier for the remote control system (remote PBS) Omega/R-Stahl/ MTL/ Pepperl+Fuchs Ammeter (digital) AE/Rishabh/L & T/Schneider Control supply transformer AE/Kappa/Siemens/reputed make CT, where required AE/Kappa/Siemens (Wire wound, 1000/5, 15 VA, Class 1 to IS: 2705) LED indication lamps for on/off/trip status L&T/BCH/ Teknik/Siemens/ Schneider/ ABB/Binay (As per voltage rating, all with LVGP) Control MCBs Schneider/Legrand/ABB/ Siemens/Indo-Asian ('C' Curve) Fuse/fuse holder GE/ Schneider/Bussman Important points to be considered while designing the starter/feeder panels: i) As the panel will be installed in an oil/gas mine, as per Central Electricity Authority Regulations 2010, the remote starting facility of starter panels for motors shall be suitable for voltage below 30 Volt and intrinsically safe. ii) All MCCBs shall have provision for padlocking and shall be provided with suitable locks with three keys for each lock. iii) MCCBs, contactors, overload relays shall be preferably of one make only. However, earth leakage relays, CBCT etc. may be of different make than contactors/OLR etc. CBCT and sensing earth leakage relay shall be compatible and from the same manufacturer. iv) One rating of components shall be used for a range of starters (e.g., one rating of contactors in all starters up to 20 HP, but suitable range of overload relay to match the panel rating). All device selection shall take motor starting current into consideration. v) For hazardous areas, 3 phase 3 wire connection shall be used including lighting loads (through lighting transformer). However, in case 3 phase, 4 wire supply (for neutral) is required, power from the 3 pole feeder will be supplied through isolation transformer (415 V/415 V, delta/star-neutral) only. Such feeders (capacity 100 A each) shall be accommodated in each PMCC panel (as per panel list given below). vi) Outgoing cables/bus links from the individual panels shall be terminated in individual TBs mounted in cable alleys. TBs will be sufficiently rated. Separate control and power TBs are to be used. TBs shall be covered/separated with insulation barriers. Also, barriers will be provided	

between adjacent TBs of separate panels.
vii) 1 (one) cubicle box with three phase 63 A RCBO as incomer and 12 nos. DP MCBs (suitably rated) for illumination and power socket outlets for the panel installation area shall also be separately provided. This cubicle box will be a stand-alone type panel. Incoming power to the cubicle will be from lighting transformer, as the lighting for the entire installation will be phase to phase 240 V and will be supplied from the lighting transformers. One such cubicle is to be supplied with each panel. The cubicle box shall be suitable for floor mounting on a sturdy MS frame.

3) Panel wiring:

i) All internal wiring and cabling inside the MCC starter panels shall be done with 1.1 KV grade fire retardant PVC insulated tinned copper multi-stranded flexible cables with proper lugs. All wires and cable shall have proper ferrule numbers for easy identification.
ii) Ring lugs shall 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 shall be accessible for testing and troubleshooting/maintenance.
iii) All control wiring inside the panels shall be done with single core, fire retardant multi-stranded flexible copper PVC insulated (1100 V) wire, 1.5 mm2 for potential circuits and 2.5 mm2 for current circuits. Control wires shall be properly identified with ferrule numbers and suitably terminated with proper sized lugs; cable make- Finolex/Havells/Henley/Nicco/Reputed brand.

4) Features of the Panel:

i) Thickness of gland plates shall be minimum 3.0 mm. Gland plates shall be removable and provided with sufficient knockouts; knockout sizes shall match individual panel outgoing cable size (which can be found out from panel capacity). Suitable SS/brass material, NiCd plated single compression cable glands shall be provided in the panels. Gland sizes shall be provided by OIL during detailed engineering/drawing approval.
ii) The panel doors shall have door latches suitable for latching in one turn only. Lifting hooks shall be provided.
iii) Special non-deteriorating Neoprene rubber gaskets shall be used in doors and as and where required.
iv) All MCCB Operating handles shall be accessible for operation without opening the cubicle door. The handles will be interlocked with doors, i.e., unless MCCB is in OFF position, door cannot be opened.
v) Adequate insulated barriers between the bus chamber and feeder shall be provided to achieve Form-2 separation as per IEC 439-1.
vi) MCCB incoming terminals are to be provided with insulating barrier so that once the door is opened, no live part is exposed.
vii) Suitable cable supporting arrangement shall be provided inside the cable alleys to firmly grip the cables connected to the terminal blocks of the outgoing feeders.The cable alleys will house sufficiently rated TBs. The cable alleys and vertical busbars shall be on either side of the panels.
viii) All motor starters and feeder cubicles will have solid copper links from busbar to the MCCB. All feeders shall have solid copper links from MCCB outgoing side to cable alley TBs. Current rating of links shall be minimum 1.5 times (rating for unassembled sections) the switch rating. All joints shall be checked for proper contact area.

ix) Wiring cables from panel to door shall be protected with heavy duty PVC spiral binding.
x) All the hardware should be of high tensile steel duly zinc passivated for corrosion protection & fitted with proper sized heavy duty spring washer & two nos. heavy duty flat washers.
xi) Sufficient space should be provided for proper glanding, dressing, connecting up and maintenance of cables. Adequate space should be provided for connecting the cable leads to the terminal blocks.
xii) All hinged doors shall be earthed with copper flexible loops / braids as per IS-3043.
xiii) A 50 x 6mm GI strip shall be provided with adequate holes (13mm dia each) with nut, bolts and washers for making earth connections for all panels and armours/screens of cables. Length of GI strip shall be same as panel length. The panel GI strap shall have provision with fasteners for connection to external earth electrodes with suitably sized GI strap.

Important: All MCCBs shall be mounted vertically. Even if the MCCBs have to be mounted horizontally due to design of feeders, the door mounted handle shall have proper position same as in panels having vertically mounted MCCBs, so that there is no confusion in operating the handle. Suitable bus links/spreader bars to incoming/outgoing sides of MCCBs shall be provided as and where required.

C. Drawings and Documents:

1. The following documents are required to be submitted with the offer.
(i) Confirmation that the offered board shall conform to all the points of the tender. Any deviation from the tender specs must be clearly mentioned with technical justifications. In case of an order on the party complete tender specs and the deviations accepted by OIL in writing shall only be mentioned in the order.
(ii) Copy of test certificate for busbar rated 1000 Amps or above for fault level of 50kA for 1 second from CPRI or any govt. approved NABL accredited test laboratory.
(iii) Copy of test certificate for panels with Degree of Protection IP: 54 from CPRI or any govt. approved NABL accredited test laboratory
(iv) Indicative general arrangement and layout drawing of the panel
(v) Indicative schematic and single line diagram of the panel
(vi) Quality Management Certification ISO : 9001 # 2008 version for Design, manufacture, installation and servicing of medium voltage Electrical control and distribution panels.
(vii) Credentials of bidder having minimum 05 (five) years (till the bid closing date) experience in design, fabrication and testing of LT PMCC Electrical Panels. During these years bidder must have manufactured and supplied minimum 2 nos. of panels to Govt./semi-govt./PSUs/Public limited companies. These panels must be in operation satisfactorily as on date.
(viii) Credentials of Bidder having minimum seven tank anti rust treatment system and powder coating facility for treatment and painting of sheet metal works for durability. Tank sequence: degreasing, water rinse, de-rusting, water rinse, activation, phosphating, water rinse, passivation.
(ix) Indicative bill of materials with offered spares list and prices of spares
(x) Filled up technical check list
(xi) General Quality Assurance Plan of the manufacturing process of the OEM

2. Detail foundation drawing, drawing of panel showing termination details, full wiring diagram, component layout diagram and complete bill of material must be submitted to OIL for approval within 30 days after placement of the order. OIL shall modify/correct drawings as necessary. The manufacturing of panels shall start only after approval of the drawings by OIL. In the event of an order on the party complete tender specifications and the deviations accepted

by OIL in writing only shall be mentioned in the order.
3. Supplier shall also submit detailed ordered panel-specific Quality Assurance Plan for the panels for OIL's approval within 30 days after placement of order. Inspection and testing details of each and every component shall be elaborately given in the QAP.
4. Six spiral bound sets of the following documents, drawings and literatures are to be supplied with the panels, for each panel:
(i) General arrangement, foundation, schematic diagram and wiring diagrams ("as built")
(ii) Works Test report containing result of tests done at factory during inspection
(iii) Guarantee Certificate
(iv) Technical Catalogues/manuals of Air circuit breakers, Moulded Case Circuit Breakers, soft starter units, starter components and Digital Meters
(v) Bill of Materials with part description, part nos. and details of items/components

D. Guarantee:
The LT panel and all parts must be guaranteed with all its components for a period of 12 months after commissioning. Party will arrange for repair/ replacement, as required by OIL, of defective parts within one month of reporting of the failure by OIL. This will be at no extra cost to OIL.

E. Testing and Inspection:
Panel shall be duly tested as per IS: 8623 at manufacturer's works and routine test certificate shall be submitted at the time of pre-despatch inspection.

In addition to the routine tests as per IS, OIL representative shall carry out pre-despatch inspection of the panel and witness all necessary testing at manufacturer's works. Bidders shall separately quote charges towards inspection and witness test, if any. [To and fro charges of OIL's personnel to manufacturer's works will be to OIL's account].

Panel shall be tested as per the following details for witness testing by OIL's representative:
(i) Accuracy of dimensions & circuitry as per approved drawings. Joints of busbar and links shall be checked for proper contact area.
(ii) Inspection of the assembly including inspection of wiring and mechanical/electrical operation of components and starters/feeders
(iii) Dielectric (insulation) tests
(iv) Checking of protective measures and of the electrical continuity of the protective circuit
(v) Secondary Injection test for Incomer breakers

Any alteration/modification requirements pointed out during the inspection shall be carried out by the manufacturer at no extra cost to OIL and confirmed before dispatch, without which dispatch clearance shall not be given. In case routine test parameters are found to be outside acceptable values, modifications shall be carried out and routine tests on the panel shall again be performed with no extra cost to OIL.
Copies of the test certificates along with bound copies of complete test results (after acceptance) shall be submitted for approval of OIL prior to dispatch of the PMCC.

F. Spares:

Bidder shall also include in their scope of supply the operational spares for the panelcomponents with their offer for panels. The quantities of the spares for the panels shallbe as follows. The spares will be exact replacement with the full rating, make and modelof the units fitted in the panel.

List of minimum indicative spares (total nos., to be supplied with the panels as per OILapproved Bill of Materials):

a) Main panel Incomer MCCB (630 A)– 01 (one) no.
b) All other outgoing feeder/starter panel MCCBs# 02 (two) nos. of each rating (400/250/100 A)
c) Soft starter- 01 (one) no.
d) High speed semiconductor fuse for soft starter- 12 (twelve) nos.
e) Intrinsic safety barrier for PBS #4 (four) nos. of each rating
f) Contactors# 12 (twelve) nos. of each rating/size (for 100 HP soft starters, 40/30/20HP SDS & 10 HP DOL starters)
g) Overload relays#12 (twelve) nos. of each rating/size (# do #)
h) MCCB mounted ELR unit- 04 nos. of each rating/size/type (if provided)
i) CBCT# 02 (two) nos. of each rating/size/type (if provided)
j) ELR (in conjunction with CBCT) #04 (four) nos. of each rating/size/type (if provided)
k) Ammeters and CTs# 03 (three) nos. of each rating and size
l) Remote local selector switch and local start/stop switch# 03 (three) nos. of each rating/size/type
m) ON/OFF/OVERLOAD/Other types LED indication lamps with low voltage glow protection# 12 (twelve) nos. each colour/type
n) One set of operating tools required to operate/maintain all the items installed in the panel like box wrench set, screw driver set etc. Standard electrician's tool kits from reputed firms like RS#Components, Stanley etc. are to be supplied.

If felt necessary, bidder may include further items in the above spares list and quote the prices for these accordingly.
Prices of the spares to be included in the main item. However price of the spares to be shown separatelyas notes and attachment of the price bid and these will be included for priceevaluation/comparison of the bids. In the event of an order, final list of spares to besupplied shall be approved by OIL, after drawing approval.

G. General Notes:
1. Material should be adequately packed to avoid damage and ingress of water during transit. OIL's PO no. and date shall be embossed/engraved on the panel.
2. All items of the offered panel must be as per IS / IEC (with latest amendments).
3. All feeders shall have engraved designation nameplates. Details of Feeder designation shall be provided by OIL at the time of approval of drawing.
4. Works Test Certificate for routine tests as per IS: 8623 (with calibrated testing equipment) and wiring diagrams shall be submitted to OIL at the time of pre-despatch inspection. Manufacturer's Routine Test certificate of incomer breakers is also to be furnished at the same time.

H. TECHNICAL CHECK LIST

The check list must be completed and returned with the offer with bidder's comment as per format detailed below. Bidder is to ensure that all the following points are covered in the offer. This will ensure proper evaluation of the offer.

Sl. No. Points Remarks (Yes/No/Agree)
1 Are you a panel manufacturer of 415 VAC PCC/MCC/PMCC panels with ACB/MCCB and

channel partner/dealer of switchgear manufacturer or have you quoted on behalf of OEM of panels? Please note: Bidders quoting on behalf of OEM of panels has to submit valid authorization certificate from the OEM along with the offer, otherwise their offer may not be considered for evaluation. 2 Have you quoted for both (a) supply and (b) installation/ commissioning of the PMCC panels at OIL's designated site/s? 3 Have you submitted experience credentials for having successfully supplied at least 2 (two) nos. of PCC/MCC/PMCC panel with ACB/MCCBs to Central Govt./State Govt./ PSU/Public limited companies in the last 5 (five) years as on bid closing date? 4 Have you submitted type test certificates for the following tests for your designed and supplied PCC/MCC/PMCC panels as per IS: 8623 (with latest amendments) from a test house/ laboratory accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India. (a) Short time current withstand test (50 kA for 1 second) (b) Ingress Protection up to IP 54 5 Have you quoted installation & commissioning charges separately? 5 Have you offered spares as per NIT along with the panels with prices? Please note that spares as per NIT list are mandatory and prices of spares will be used for evaluation of offer. 6 Have you submitted full technical specifications for the PMCC and accessories, indicative dimensional/GA and layout drawings of PMCC, indicative wiring diagram, QAP, Bill of Materials and datasheets of all the components used in the PMCC along with the quotation? 7 Do you agree for pre-despatch inspection? Please note that routine test certificates etc. are to be submitted at the time of final inspection, failing which dispatch clearance will not be given. 8 Have you offered guarantee for 12 (twelve) months from the date of commissioning for the offered panels? 9 Have you mentioned any deviations or other items/ points not indicated /included in the specifications but deemed necessary for design, Installation and commissioning, efficient control and operation of the PMCC? I. Scope of Supply 1. Complete panels with the specifications as mentioned in the detailed specifications of PO 2. Lighting cubicle box (one with each panel) 3. Commissioning spares- any left out spares shall be handed over to OIL. 4. Full sets of spares and tools as per OIL's approved list 5. "As-Built" drawings (Schematic and SLD), technical brochures & operation and maintenance manuals of all items, catalogues, test report etc. after final installation and commissioning, 06 (six) copies each. J. Scope of Installation and Commissioning: Supplier shall install and commission the PMCC panels in the designated installation of OIL. Supplier shall arrange for all manpower, tools and tackles, instruments etc. necessary for installation and commissioning of the PMCC panels. Jobs: 1. Installation and fixing (including cement grouting) of the supplied panels in the shed (Shed and trench/ foundation shall be constructed by OIL) 2. Connection of the incomer cables (supplied by OIL) to the PMCC incomer breaker (s) 3. Dismantling of the outgoing cables from old panels and connection (including jointing if required) to the new panels, including connection of the new cables if required (supplied by	

OIL). All cable lugs, terminals, ferrules, heat shrinkable cable jointing kits of proper size shall be supplied by the party. 4. Earthing of the panels as per IS: 3043, with GI straps and chemical earth electrodes (as per the specifications): 02 nos. for each panel's body/equipment earthing: All items shall be supplied by the party. Chemical earth electrode specs: Flat in pipe, flat size min. 65 mm, pipe size min. 85 mm, length of electrode: 3000 mm, with mineral backfill compound 2 nos. 20 kg bags per electrode. 5. Energization and testing of the panels- in no load condition 6. Testing of the panels in full load condition, including simulation of faults, with available loads 7. Any field modification jobs in the panel including wiring modification jobs 8. Submission of testing and commissioning reports and "As-built" drawings K. ITEM NO. 20: PMCC PANEL FOR FORMATION WATER DISPOSAL PUMP HOUSE SL. No. INCOMER/STARTER/FEEDER PANEL CAPACITY/ MOTOR/LOAD (HP/A) QTY. (NO.) PANEL CAPACITY (HP) REMARKS 1 Incomer MCCB panel 630 A 2 - 2 Outgoing starter panel 100 HP 2 100 HP Soft starters are to be used. 3 Outgoing starter panel 40 HP 4 40 HP Star-delta starters are to be used.All the starters shall have remote/ local selector, as these will be operated remotely with the push button stations near the load. 4 Outgoing starter panel 30 HP 4 40 HP 5 Outgoing starter panel 20 HP 4 40 HP 6 Outgoing starter panel 10 HP 4 10 HP DOL starters to be used. 7 Outgoing feeder panel 100 A 4 - One no. for lighting transformer 8 1 (one) cubicle box with double pole 63 A RCBO as incomer and 12 nos. DP MCBs (suitably rated) for illumination and power socket outlets of the shed shall be provided. One 20 A industrial metallic plug socket is to be arranged in the box itself. 63 A This cubicle box will be a stand-alone type panel. Incoming power to the cubicle will be from lighting transformer, as the lighting will be ph-ph 240 V. All the above starters shall have remote/local selector, as these will be operated remotely with the push button stations near the load.	
ITEM NO. 30 (FOR BOTH ITEM NO. 1 & 2) **INSTALLATION AND COMMISSIONING: 1AU** **Supplier shall install and commission the PMCC panels in the designated installation of OIL.** **Supplier shall arrange for all manpower, tools and tackles, instruments etc. necessary for installation and commissioning of the PMCC panels.** **Jobs:** 1. Installation and fixing (including cement grouting) of the supplied panels in the shed (Shed and trench/ foundation shall be constructed by OIL) 2. Connection of the incomer cables (supplied by OIL) to the PMCC incomer breaker (s) 3. Dismantling of the outgoing cables from old panels and connection (including jointing if required) to the new panels, including connection of the new cables if required (supplied by OIL). All cable lugs, terminals, ferrules, heat shrinkable cable jointing kits of proper size shall be supplied by the party.	

4. Earthing of the panels as per IS: 3043, with GI straps and chemical earth electrodes (as per the specifications): 02 nos. for each panel's body/equipment earthing: All items shall be supplied by the party. Chemical earth electrode specs: Flat in pipe, flat size min. 65 mm, pipe size min. 85 mm, length of electrode: 3000 mm, with mineral backfill compound 2 nos. 20 kg bags per electrode. 5. Energization and testing of the panels- in no load condition 6. Testing of the panels in full load condition, including simulation of faults, with available loads 7. Any field modification jobs in the panel including wiring modification jobs 8. Submission of testing and commissioning reports and "As-built" drawings	

Item Note:

1. PMCC panels shall be installed and commissioned by the supplier at Hebeda OCS at Hebeda village, P.S. Lankashi, Dist. Tinsukia, Assam, as per instruction and as listed in the tender. Supplier will be intimated one month in advance for installation and commissioning. Boarding, lodging and transportation of commissioning personnel to/from site will be in the scope of the supplier. Bidder shall quote commissioning charges separately. All necessary manpower, tools and tackles, instruments etc. required for commissioning shall be in the scope of the supplier.

2. The following documents shall be submitted with the bid for scrutiny:

a) Confirmation that the offered panels shall conform to all the points of the tender. Any deviation from the tender specs must be clearly mentioned with technical justifications. In case of an order on the party complete tender specs and the deviations accepted by OIL in writing shall only be mentioned in the order.

b) Copy of test certificate for busbar rated 1000 Amps or above for fault level of 50kA for 1 second from CPRI or any govt. approved NABL accredited test laboratory.

c) Copy of test certificate for panels with Degree of Protection IP: 54 from CPRI or any govt. approved NABL accredited test laboratory

d) Indicative general arrangement and layout drawing of the panel

e) Indicative schematic and single line diagrams of the panel

f) Credentials of bidder having minimum 05 (five) years (till the bid closing date) experience in design, fabrication and testing of LT PMCC Electrical Panels with ACBs and MCCBs. During these years bidder should have manufactured and supplied minimum 2 (two) nos. of panels to Govt./semi-govt./PSUs/public limited companies.

g) Credentials of Bidder having minimum seven tank anti rust treatment system and powder coating facility for treatment and painting of sheet metal works for durability.

h) Indicative bill of materials with spares list and prices of spares

i) Filled up technical check list

In the event of an order, successful bidder shall submit fresh sets of detailed drawings (as mentioned above) within one month of placement of order which shall be approved by OIL before actual assembly/ manufacturing of the PMCC panels.

3. Offered panels must be new and in unused condition. No reconstructed/ rebuilt panels will be acceptable.

4. Both PMCC panels shall be identical in terms of construction, except for size/capacity and nos. of incomers/outgoing starters and feeders. Hence BDT (basic data text) shall be same for both the items. Only the list of incomers/outgoing feeders will be different.

5. Components used in the PMCC panels shall be of makes (as given in the detailed description) and easily available. Bidder shall submit Bill of Materials (including any additional item to the item list given in the

detailed description, if considered essential). Bidder shall also supply all spares essential for installation and commissioning of the PMCC panels at the designated site of OIL.

6. Bidder shall also include in their scope of supply the operational spares for the panel components with their offer for panels. The quantities of the spares for the panels shall be as follows. The spares will be exact replacement with the full rating, make and model of the units fitted in the panel.

List of minimum indicative spares (to be supplied with the panels as per OIL approved Bill of Materials):

a) Main panel Incomer MCCB (630 A)– 01 (one) no.
b) All other outgoing feeder/starter panel MCCBs# 02 (two) nos. of each rating (400/250/100 A)
c) Soft starter- 01 (one) no.
d) High speed semiconductor fuse for soft starter- 12 (twelve) nos.
e) Intrinsic safety barrier for PBS #4 (four) nos. of each rating
f) Contactors# 12 (twelve) nos. of each rating/size (for 100 HP soft starters, 40/30/20HP SDS & 10 HP DOL starters)
g) Overload relays#12 (twelve) nos. of each rating/size (# do #)
h) MCCB mounted ELR unit- 04 nos. of each rating/size/type (if provided)
i) CBCT# 02 (two) nos. of each rating/size/type (if provided)
j) ELR (in conjunction with CBCT) #04 (four) nos. of each rating/size/type (if provided)
k) Ammeters and CTs# 03 (three) nos. of each rating and size
l) Remote local selector switch and local start/stop switch# 03 (three) nos. of each rating/size/type
m) ON/OFF/OVERLOAD/Other types LED indication lamps with low voltage glow protection# 12 (twelve) nos. each colour/type
n) One set of operating tools required to operate/maintain all the items installed in the panel like box wrench set, screw driver set etc. Standard electrician's tool kitsfrom reputed firms like RS#Components, Stanley etc. are to be supplied.

If felt necessary, bidder may include further items in the above spares list.

Prices of the spares shall be shown separately and these will be included for price evaluation/comparison of the bids. In the event of an order, final list of spares to be supplied shall be approved by OIL, after drawing approval.

7. Bidder shall mention any deviations or other items/ points not indicated /included in the specifications but deemed necessary for design, Installation and commissioning, efficient control and operation of the PMCC panels. However, proper justification for deviation must be given.

8. OIL representatives shall carry out pre-despatch inspection of panels and witness all necessary testing at manufacturer's works. Bidders shall separately quote charges towards inspection and witness test, if any. [To and fro charges of OIL's personnel to manufacturer's works will be to OIL's account].

9. Routine Test certificates/reports for the PMCC panels carried out at manufacturer's works as per relevant IS shall be submitted at the time of final inspection by OIL's representative failing which despatch clearance will not be given.

10. PMCC panels shall be guaranteed for 12 (twelve) months from the date of commissioning.

11. Supplier shall submit "As-Built" drawings [6 (six) copies each] for the PMCC panels (after final assembly and commissioning at site) before handing over the same to OIL. In addition, supplier shall also submit technical brochures & operation and maintenance manuals of all items used in the panels.

12. Packing shall be done properly to avoid transit damage and water/ moisture ingress.
13. The PMCC panels will be used in the NELP/PEL/ML areas of OIL.

NOTE:

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

TECHNICAL CHECK LIST (FOR BOTH THE ITEM)

The check list must be completed and returned with the offer with bidder's comment as per format detailed below. Bidder is to ensure that all the following points are covered in the offer. This will ensure proper evaluation of the offer.

Sl. No. Points Remarks (Yes/No/Agree)

1 Are you a panel manufacturer of 415 VAC PCC/MCC/PMCC panels with ACB/MCCB and channel partner/dealer of switchgear manufacturer or have you quoted on behalf of OEM of panels? Please note: Bidders quoting on behalf of OEM of panels has to submit valid authorization certificate from the OEM along with the offer, otherwise their offer may not be considered for evaluation.

2 Have you quoted for both (a) supply and (b) installation/ commissioning of the PMCC panels at OIL's designated site/s?

3 Have you submitted experience credentials for having successfully supplied at least 2 (two) nos. of PCC/MCC/PMCC panel with ACB/MCCBs to Central Govt./State Govt./ PSU/Public limited companies in the last 5 (five) years as on bid closing date?

4 Have you submitted type test certificates for the following tests for your designed and supplied PCC/MCC/PMCC panels as per IS: 8623 (with latest amendments) from a test house/ laboratory accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India.

(a) Short time current withstand test (50 kA for 1 second)

(b) Ingress Protection up to IP 54

5 Have you quoted installation & commissioning charges separately?

5 Have you offered spares as per NIT along with the panels with prices? Please note that spares as per NIT list are mandatory and prices of spares will be used for evaluation of offer.

6 Have you submitted full technical specifications for the PMCC and accessories, indicative dimensional/GA and layout drawings of PMCC, indicative wiring diagram, QAP, Bill of Materials and datasheets of all the components used in the PMCC along with the quotation?

7 Do you agree for pre-despatch inspection? Please note that routine test certificates etc. are to be submitted at the time of final inspection, failing which dispatch clearance will not be given.

8 Have you offered guarantee for 12 (twelve) months from the date of commissioning for the offered panels?

9 Have you mentioned any deviations or other items/ points not indicated /included in the specifications but deemed necessary for design, Installation and commissioning, efficient control and operation of the PMCC?

Annexure- DDD

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble :

The Principal intends to award, under laid down organizational procedures, contract/s for Tender No. **SDI1363P17** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

3. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which h e/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the

amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

1. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 - Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.

2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/Contractor/Subcontractors

1. The Bidder/Contractor undertakes to demand form all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.

3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - External Independent Monitor/Monitors (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal)

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8. The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section 10 - Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

R BARMAN
SR MANAGER MATERIALS (IP)

For the Principal

For the Bidder/Contractor

Place. Duliajan.

Witness 1 : .....

Date 08.06.2016 .

Witness 2 : .....

Technical Bid Checklist **Annexure-EEE**

Tender No.	
Bidder's Name :	

SL. NO.	BEC / TENDER REQUIREMENTS	Compliance by Bidder	
		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

Sl 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

ANNEXURE - GGG

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

Tender No.	**:……**
Name of Beneficiary	**:M/s.……**
Vendor Code	**:……...**
Address	**:...……**
	...……...
Phone No. (Land Line)	**:...……**
Mobile No.	**:...……**
E-mail address	**:...……**
Bank Account No. (Minimum	
Eleven Digit No.)	**:...……**
Bank Name	**:...……**
Branch	**:...……**
Complete Address of your	**:...……**
Bank	**:...……**
IFSC Code of your Bank	
a) RTGS	**:……...**
b) NEFT	**:……...**
PAN	**:……...**
VAT Registration No.	**:……...**
CST Registration No.	**:……...**
Service Tax Registration No.	**:……...**
Provident Fund Registration	**:……...**

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

……
Office Seal **Signature of Vendor**

Counter Signed by Banker:
Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

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