

**INDIA LIMITED**  
**( A Govt. of India Enterprise )**  
**4, India Exchange Place,**  
**Kolkata – 700 001.**  
**E-mail : oilcalmn@oilindia.in**  
**INVITATION FOR BID**  
**NATIONAL COMPETITIVE BID**

**OIL INDIA LIMITED** invites National Competitive Bid through its e-procurement portal – <https://etender.srm.oilindia.in/iri/portal> for the following items :-

<b>E-Tender No.</b>	<b>Bid Closing Date</b>	<b>ITEM</b>
SKI0634 P19/03	26.03.2019	Supply, installation & commissioning of 125 KVA diesel generating set

Period of sale of documents, Bid Closing / Opening date, the complete bid documents and details for purchasing bid documents, participation in e-tenders etc. are available on OIL's e-procurement portal <https://etender.srm.oilindia.in/iri/portal> as well as OIL's website <http://www.oil-india.com/>.

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)**  
**4, India Exchange Place**  
**Kolkata -700001**

TELEPHONE NO. (033) 22301657

FAX NO: (033) 22302596

Email: [kolpur2@oilindia.in](mailto:kolpur2@oilindia.in)

**FORWARDING LETTER**

Tender No & Date	:SKI 0634 P19/03
Tender Fee	: NIL (PLEASE REFER TO DOCUMENT-‘SPECIAL NOTE’)
Bid Security Amount	:Rs. <b>61,200/-</b>
Bidding Type	:Single Stage Two Bid
Bid Closing on	: As mentioned in the e-portal
Bid Opening on	: As mentioned in the e-portal
Performance Guarantee	: Applicable
Integrity Pact	: Not Applicable
Delivery Required	: <b>At Manabhum in Arunachal Pradesh (India).</b>

OIL invites Bids for **Supply, installation & commissioning of 125 KVA diesel generating set 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/CALCUTTA/E-01/2016. 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 Department at following: Tel. No.s = 0374-2807178, 0374-2807171 , 0374-2807192. Email- id = [erp\\_mm@oilindia.in](mailto:erp_mm@oilindia.in).
- b)** “General Terms & Conditions” for e-Procurement as per Booklet NO. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).
- c)** Technical specifications with Quantity and BEC/BRC and Price bid format as per **ANNEXURE AAA , ANNEXURE BBB and ANNEXURE CCC** respectively.
- d)** The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area -> Tender Documents.
- e)** Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).
- f)** Bidder are advised to fill up the **Undertaking of authenticity of information/documents submitted (Annexure- K), Technical evaluation sheet (Annexure HHH), Financial check list (Annexure DDD) Commercial check list (Annexure EEE) , bidders Response sheet (Annexure FFF) and Bank Details**

**(Annexure GGG)** given in this bidding document uploaded in Technical RFx -> External Area -> Tender Documents. The above filled up documents to be uploaded in the Technical RFX Response.

- g) 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.**

**Special Note:**

1.0 Bidders to take special note of the following conditions:

~~1.1 Against Tender Fee — Payment should be made only through online mode and no other instrument (Cash/DD/Cheques/Cashier Cheque, etc) will be acceptable.~~

~~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 online through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).~~ **(PLEASE REFER DOCUMENT-' SPECIAL NOTE')**

1.2 Against Bid Security/EMD/Performance Bank Guarantee – **Only payments through online mode or Submission of Bank Guarantee will be acceptable.** No DD/Cheques/Cashier Cheque or any other mode will be acceptable.

1.3 A) Bidders submitting bank guarantee as **Bid Security** should note that the bank guarantee issued by the bank must be routed through SFMS platform as per following details:

- (i) MT 760 / MT 760 COV for issuance of bank guarantee
- (ii) MT 767 / MT 767 COV for amendment of bank guarantee

The above message / intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Corporate Banking Branch, IFSC Code - UTIB0001164. Branch Address - AXIS Bank Ltd, Corporate Banking Branch, 3<sup>rd</sup> Floor, AC Market, 1, Shakespeare Sarani, Kolkata 700071."

**B) The Bidder shall submit to OIL the copy of SFMS message as sent by the issuing bank branch along with the original bank guarantee.**

Note : In the event of an order, similar process will be required to be followed by the bidder in case of submission of Performance Security in the form of Bank guarantee.

2.0 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 **GM-Kolkata Office, Oil India Limited, 4, India Exchange Place, Kolkata – 700 001** only on or before the Bid Closing Date and Time mentioned in the Tender.

a) Original Bid Security

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in triplicate.

**3.0** 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.

4.0 To participate in OIL's E-procurement tender, bidders should have a legally valid Digital Signature Certificate as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (<http://www.cca.gov.in>). The

digital signature should be of Class 3 digital certificate alongwith encryption certificate for the designated individual with organization name. Please also refer “**Guideline to Bidder for participating in OIL**”. All the Bids must be Digitally Signed.

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

**6.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM.** Bidders shall quote accordingly 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.**

**6.1 Please ensure that Techno-commercial Bid / all technical related documents related to the tender are uploaded in the Technical Attachment as shown in the screen shot below. 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 Attachment.**

**6.2 The “PRICE BID” must contain the price schedule and the bidder’s commercial terms and conditions. Details of prices as per Price Bid format/Priced bid can be uploaded as Attachment in the attachment option under “Notes & Attachments” tab as shown in the screen shot below.**

**A screen shot in this regard is shown below.**

#### Upload Technical Bid / Price Bid.

1.

Response - Oil India Ltd - SRM QAS Portal - Internet Explorer

http://smqas.oilindia.in:50100/ig/portal

Area for uploading “Priced Bid” if the detailed price information is “No Price”

Area for uploading “Priced Bid” if the detailed price information is “Price with Condition”

Display RFx Response:

RFx Response Number: 60065572 RFx Number: Status: Saved Submission Deadline: Opening Date: 11.04.2017 00:00:00

Total Value: XXXXX INR RFx Response Number: Active Version: 1

RFx Information Items Notes and Attachments Conditions Summary Tracking

Basic Data Questions Technical Attachments

Event Parameters

Currency: Indian Rupee

Detailed Price Information: Price with Conditions

Terms of Payment: OTH Others (Please specify under attributes)

Service and Delivery

Incoterms: FOB SINGAPORE

Area for uploading “Techno-commercial Unpriced Bid”

Please do not upload price under “Technical Attachment”

Partners and Delivery Information

Details: Send E-Mail Call Clear

Function	Number	Name
The table does not contain any data		

2. 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:

**The “Techno-Commercial Unpriced Bid” shall contain all technocommercial details except the prices.**

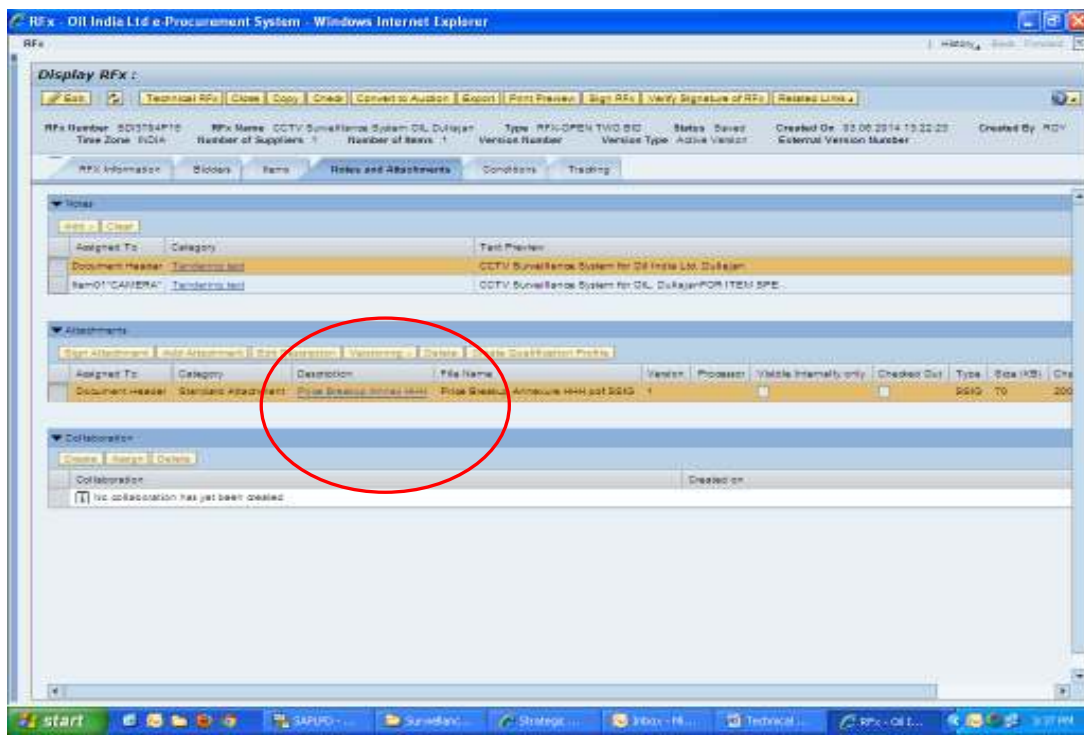
**\*\* Please follow the instructions as per Vendor User Manual for Uploading Price under “Notes and Attachment” or “Condition”**

**6.3 Any Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.**

**6.4 Only the price-bids of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.**

### **6.5 Price Breakup/format:**

Bidders should submit the price breakup/format of all the items as per “Annexure CCC” which has been uploaded under “Notes & Attachments” > “Attachments” as shown below. The price breakup/format “Annexure CCC” should be filled up, signed and uploaded under “Notes & Attachments” > “Attachments” only. **The filled up price breakup/format of all the items should not be uploaded in Technical Attachment.**



Please do refer “**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**” for the above two points and also please refer “**New Vendor Manual (effective 12.04.2017)**” available in the login Page of the OIL’s E-tender Portal.



**NOTE:**

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

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

8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-BBB**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-BBB**) contradict the Clauses of the tender and / or “General Terms & Conditions” as per



Booklet No. MM/CALCUTTA/E-01/2016 for E- Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

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

10.0 In order to bid for OIL e-tenders all the vendors are required to obtain a legally valid Digital Certificate Class III [ Organization] along with encryption certificate as per Indian IT act from the licensed certifying authorities(CA) operating under the root certifying Authority of India (RCAI), controller of certifying authorities (CCA) of India. Digital Signature Certificate comes in a pair of Signing/Verification and Encryption /decryption certificate. Bidder should have both the Signing/Verification and Encryption /decryption certificate for signing and Encryption, decryption purpose respectively. The driver needs to be installed once, without which the DSC will not be recognized. While participating on e-Tendering the DSC token should be connected to your system.

Encryption certificate is mandatorily required for submission of bid. In case bidder created response with one certificate (using encryption key) and bidder change his Digital Signature Certificate then old certificate (used for encryption) is required in order to decrypt his encrypted response for getting the edit mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LIMITED is not responsible.

11.0 ~~For exemption for tender fee, please refer Clause No. 3.3 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E procurement (LCB Tenders).~~  
**(PLEASE REFER DOCUMENT-' SPECIAL NOTE')**

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

**13.0 In addition to the existing clause of accepting Bid Security and Performance Security in the form of Bank Guarantee in Para No. 8.2 and 9.3 in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders) to include the below mention point as well:**

**"#Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non - Scheduled Bank of India shall not be acceptable."**

**14.0** The items covered by this Tender shall be used by Oil India limited in the PEL / ML areas which are issued / renewed after 01/04/99 and hence bidder shall be eligible for concessional rate of GST against Essentiality Certificate for Invoice valuing INR 1 lakh & above. The supplier shall arrange to provide all necessary documents to apply for essentiality certificate from DGH. Supplier shall affect despatch only on receipt of this certificate from OIL, failing which all related liabilities shall be to supplier's account.

## **15.0 CLAUSES RELATED TO GST**

### **(A) Taxes:**

- i. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:
  - (a) GST - means any tax imposed on the supply of goods and/or services under GST Law.
  - (b) Cess - means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.
  - (c) GST Law - means IGST Act 2017, CGST Act 2017, UTGST Act, 2017and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.

- ii. The rates quoted by the bidders shall be inclusive of all taxes, duties and levies. However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties and levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have the right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, bidders have to clearly show the amount of GST separately in the Tax invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- iii. Offers without giving any of the details of the taxes (including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates and amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ contracts will be binding on the bidder.
- iv. Bidder is required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidder must confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and must also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidder to ensure that the intended benefits of GST have been passed on to OIL.
- v. Statutory variation (increase/decrease) of GST within the contractual delivery period will be to the account of OIL subject to documentary evidence. However, any increase in statutory levy after the expiry of the scheduled date of delivery shall be to the supplier's account.
- vi. Bidder agrees to do all things but not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and also for claiming input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.
- vii. In case Input Tax Credit of GST is denied to OIL or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by Bidder/Supplier, including non-payment of GST charged and recovered, the Bidder/Supplier shall indemnify OIL in respect of all such claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such an amount demanded and recovered by the authorities/ state authorities from the pending payments of the Bidder/Supplier.
- viii. GST liability, if any on account of supply of free samples against any tender/purchase order (wherever applicable) shall be to bidder's/ supplier's account.

Yours Faithfully,

(Aparajita Gogoi )  
Sr. Manager Materials (P)  
For GM-Kolkata Office



**Annexure - AAA**

**TECHNICAL SPECIFICATIONS WITH QUANTITY**

SLNO & MATERIAL CODE NO.	MATERIAL DESCRIPTION.	QUAN TITY	UOM
10 ----- 0C000242	Diesel Generating set of capacity 125 KVA complete with Diesel Engine, Alternator, Electric Control Panel and Acoustic Enclosure.  Detail description is given in the annexure- HHH	03	NOS
20	INSTALLATION & COMMISSIONING	1	AU

**Note:**

1.0 Delivery of all items under the scope of the order must be completed within 6 (six) months from date of firm placement of order. The installation and commissioning work of the order that are with the scope of the supplier must be completed within 3(three) months from date of delivery. Bidder to confirm the same while quoting.

2.0 The bidder must submit the offer in the attached format i.e. annexure-HHH by duly filling up the "Bidder's Remarks" column (extra sheet if required may please be attached).

**Annexure-BBB**  
**BID REJECTION & BID EVALUATION CRITERIA**

**I) BID REJECTION CRITERIA**

The bid must conform to the specifications and terms and conditions given in the enquiry. Bid will be rejected in case the items offered do not conform to all the required technical parameters stipulated in the technical specifications and to the respective international / national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected.

**A. BID REJECTION CRITERIA (TECHNICAL)**

**(1)** The diesel engine shall conform to IS10000/ISO 3046/BS 5514 standards (amended up to date) in design and shall meet the latest norms of the Environment (protection) Act 1986 (CPCB II) for emission and noise level. The bidder shall furnish Type Approval and Conformity of Product certificates from the authorized agencies for certification.

**(2)** The rated output of the diesel engine shall be not less than 155 BHP (gross) at 1500 RPM and STP condition and it should be suitable for driving a generator rated for 125KVA output Prime Duty and G3 Performance Class as per ISO 8528-5.

Note:

Bidder shall provide standard manufacturer's catalogue as documentary evidences in support of the engine/generator ratings specified in clause (2) above.

**(3)** The offered engine (Make & Model) must be proven in generator set application and the bidder shall furnish documentary evidence of PTR (proven Track record) with the technical bid.

**(4)** Bidder shall be an Original Equipment Manufacturer or its authorized dealer of any of the following items offered:

- a) Generating set
- b) Engine
- c) Alternator

Note:

- i) Valid OEM or Authorized Dealership Certificate, as the case may be, shall be submitted in the technical bid by the bidder.
- ii) If the engine or the alternator or both the engine and alternator are bought-out item for a bidder, it must be purchased from the respective OEM or their authorized dealer only.

An undertaking shall be submitted by the bidder along with the technical bid that supporting documentary evidence of such purchase(s) shall be furnished during the pre-dispatch inspection in the event of order.

**(5)** The bidder must have experience of successfully executing at least one order for **Rs. 15.28 Lakhs** for generating sets of any capacity between 30KVA to 250KVA during the last 5(five) years before the bid closing date (to be reckoned from the original bid closing date) of this tender to organizations namely PSU (State/Central Government of India) or State/Central Govt. Department of India or any other public Limited company

The bidder must furnish customer's purchase order copy with invoices in support of its experience.

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

ii. **The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.**

**B) BID REJECTION CRITERIA (FINANCIAL) :**

1.0 Annual Financial Turnover of the bidder during **any of preceding three financial / accounting years from the original bid closing date** should be at least **Rs. 15.28 Lakhs.**

**1.1 Net worth** of bidder must be positive for preceding financial/ accounting year.

2.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (as the case may be) has actually not been audited so far'.

**Note:** (a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-

i) A certificate issued by a practicing Chartered/ Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **ANNEXURE-B.**

OR

ii) Audited Balance Sheet along with Profit & Loss account."

b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

**Note: The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.**

**C) BID REJECTION CRITERIA (COMMERCIAL):**

Commercial Bid Rejection Criteria will be as per "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 with following Special Bid Rejection Criteria.

1.0 Bids are invited under **Single Stage Two Bid System**. Bidders shall quote accordingly under Single Stage Two Bid System. **Please note that no price details should be furnished in the Technical (i.e. Unpriced) bid.** The "Unpriced Bid" shall contain all techno-commercial details except the prices, which shall be kept blank. The "Price Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected. **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.**

The bidder has to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" bid through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

1.1 In Technical Bid opening, only Technical RfX will be opened. Therefore, the bidder should ensure that "TECHNO-COMMERCIAL UNPRICED BID" should contain details as mentioned in

the technical specifications as well as BEC/ BRC , techno- commercial details including quantity offered except prices which shall be kept blank and upload the same in the Technical RFX Response-> User - > Technical Bid. **No price should be given in above Technical Rfx otherwise the offer will be rejected.** Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RFX Response-> User - > Technical Bid only. The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. **Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments". Priced bids of only those bidders will be opened whose offers are found to be techno-commercially acceptable.**

**2.0 Bid security of Rs. 61,200/-** shall be furnished as a part of the TECHNICAL BID (refer Clause No. 8.0 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders)). The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to CGM-KOLKATA OFFICE, OIL INDIA LIMITED, 4 INDIA EXCHANGE PLACE, ICC BUILDING, 4<sup>TH</sup> FLOOR, KOLKATA – 700001, INDIA on or before the Bid Closing Date and Time mentioned in the Tender.

**Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.**

A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.

2.1 For exemption for submission of Bid Security, please refer Clause No. 8.16 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/CALCUTTA/E-01/2016 for E-procurement (LCB Tenders).

**2.2 The Bank Guarantee towards Bid Security shall be valid upto 22.10.2019 .(i.e. 90 days from the Bid Validity)**

**3.0** Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. Validity of the performance security shall be valid for 90 days beyond contract period/duration and applicable warranty/guarantee/defect liability period (if any). Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

**4.0** 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.

**5.0 Validity of the bid shall be minimum 120 days from the Bid Closing Date. Bids with lesser validity will be rejected.**

**6.0** Bids containing incorrect statement will be rejected.

**7.0** No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.

**8.0** All the Bids must be Digitally Signed using "Class 3" digital certificate (e-commerce application) with Bidder's organization name 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" digital certificate with Bidder's organization name, will be rejected.

**9.0** The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly.

**10.0** Bidders are required to submit the summary of the prices in their Commercial (Priced) bids as per bid format (Summary), given in **Annexure CCC** below:

**PRICE SCHEDULE**

Tender No.: \_\_\_\_\_

	Item No.	
	HSN Code	
	Basic material Value (Unit Rate)	In Rupees
	Quantity	
A.	Total Basic Material Value (Unit rate x Quantity)	
B.	Pre-despatch Inspection charges, if any	
C.	Packing and forwarding charges, if any	
D.	Total Ex-works value ( A+B+C)	
E.	GST on (D)	
F.	Compensatory Cess, if any	
G.	Total FOR Despatching Station Value ( D+E+F)	
H.	Freight Charges upto destination i.e. Manabhum, Arunachal Pradesh	
I.	GST on freight charges	
J.	Insurance charges inclusive of GST	
K.	Installation & Commissioning Charges, if any	
L.	GST on I & C charges	
M.	Total FOR Destination Value (G+H+I+J+K+L)	In Rupees

Gross weight of the total consignment  
 Gross volume of the total consignment  
 Name of Despatching Station  
 Delivery Period  
 Validity  
 Payment terms  
 Name of original manufacturer  
 Other terms if any

Name of Bidder \_\_\_\_\_  
 Full Name :  
 Address :  
 Date :

**Note:**

- Bidders must quote Freight Charges upto destination specified in tender. In case bidder fails to quote inland freight charges, highest freight quoted by the other bidder (considering pro-rata distance) against this tender or OIL's estimated freight, whichever is higher, shall be loaded to their offer for comparison purpose.
- Inspection Charges (Ref. B) and I&C Charges (Ref K & L) are to be quoted wherever specifically asked for in the tender.
- Other clauses on Goods & Service Tax shall be applicable as incorporated elsewhere in this tender.

## **II) BID EVALUATION CRITERIA**

**The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria mentioned below:**

1.0 The evaluation of bids will be done as per the Price Schedule (SUMMARY) detailed vide **Para 10.0** of Bid Rejection Criteria (commercial) .

2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

3.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be done on FOR Destination basis, subject to corrections / adjustments given herein.

4.0 In case any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of the Tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.



**FINANCIAL CHECKLIST***(To be filled up and submitted along with Unpriced bid)*

<b>Tender no.</b>	
<b>Bidder's name</b>	

Sl. No.	BEC / TENDER REQUIREMENTS	Please strikeout whichever is <i>not applicable</i>
1	Have you submitted “ <b>proof of Annual Turnover &amp; Net worth</b> ” i.e. (Audited Balance Sheet along with Profit & Loss account <b>or</b> certificate issued by a practicing Chartered/ Cost Accountant’ Firm certifying the Annual turnover & Net worth as per format prescribed in <b>ANNEXURE-B</b> )”?	YES / No
2	In case of submission of certificate as per format prescribed in ANNEXURE-B, whether the certificate has been issued by practicing <b>Chartered Accountants’ firm</b> on their letter head?	YES / No / Not Applicable
3	Whether the financial documents like Audited Balance Sheet, Profit & Loss account, certificate issued by a practicing Chartered/ Cost Accountant contains <b>Membership Number</b> ?	YES / No
4	Whether the financial documents like Audited Balance Sheet, Profit & Loss account, certificate issued by a practicing Chartered/ Cost Accountant contains <b>Firm Registration Number</b> ?	YES / No
5	<b>In case the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder:</b>  Have you submitted <b>affidavit/undertaking</b> certifying that ‘the balance sheet/Financial Statements for the financial year..... (as the case may be) has actually not been audited so far’.	YES / No / Not Applicable

**COMMERCIAL CHECKLIST***(To be filled up and submitted along with the bid)*

<b>Tender no.</b>	
<b>Bidder's name</b>	

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.(120 days from BC date)		
2	Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable)?		
2.1	Confirm that original bid bond guarantee has been submitted in format MENTIONED IN NIT.		
3	Confirm that you shall submit Performance security as per NIT (in the event of placement of order) (Wherever Applicable)?		
4	Confirm that duly signed Integrity Pact has been submitted as per NIT?		
5	Confirm that you have submitted documentary evidence as per BRC Technical		
6	Confirm that the offers and all attached documents are digitally signed using Class 3# digital certificate (e-commerce application) in Organization Name issued by an acceptable Certifying Authority (CA) as per Indian IT. Act 2000.NIT.		
7	Confirm that you have not taken any exception/deviations to the NIT.		
8.	Confirm that the product offered strictly conform to the technical specifications.		
9	Confirm that the prices offered are firm. <i>(Conditional offer shall be liable for rejection.)</i>		
10	Confirm that you have submitted undertaking of authenticity of information/documents as per annexure-		

**NOTE: Please fill up the greyed cells only.**

**Bidders Response Sheet- Annexure FFF**

<b>No.</b>	<b>Tender No.</b>	
	<b>Bidders Name</b>	
<b>Sl</b>	<b>Description</b>	<b>Remarks</b>
<b>1</b>	<b>Place of Despatch</b>	
<b>2</b>	<b>Whether Freight charges have been included in your quoted</b>	
<b>3</b>	<b>Whether Transit Insurance charges have been included in your</b>	
<b>4</b>	<b>Make of quoted Product</b>	
<b>5</b>	<b>Offered Validity of Bid as per NIT</b>	
<b>6</b>	<b>Bid Security Submitted (if applicable)</b>	
<b>6</b>	<b>Details of Bid Security Submitted to OIL (if applicable)</b>	
	<b>a) Bid Security Amount (In Rs):</b>	
	<b>b) Bid Security Valid upto:</b>	
<b>7</b>	<b>Whether you shall submit Performance Security in the event of placement of order on you</b>	
<b>8</b>	<b>Integrity Pact Submitted</b>	
<b>9</b>	<b>Delivery Period in weeks from placement of order</b>	
<b>10</b>	<b>Complied to Payment terms of NIT (if applicable) otherwise to Standard</b>	
<b>11</b>	<b>If bidder is MSE whether you have quoted your own product</b>	
<b>12</b>	<b>If bidder is Small scale unit, whether you are owned by SC/ST</b>	
<b>13</b>	<b>If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager</b>	
<b>14</b>	<b>Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the bidding</b>	
<b>15</b>	<b>Bid Security if Not submitted, reasons thereof</b>	

**NOTE: Please fill up the greyed cells only.**

**(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.

**Format of undertaking by Bidders towards submission of authentic information/documents  
(To be typed on the letter head of the bidder)**

Ref. No \_\_\_\_\_

Date \_\_\_\_\_

**Sub: Undertaking of authenticity of information/documents submitted**

**Ref: Your tender No. \_\_\_\_\_ Dated \_\_\_\_\_**

To,  
The General Manager-Kolkata Office  
Oil India Limited  
Kolkata

**Sir,**

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,  
For (type name of the firm here)

Signature of Authorised Signatory

Name :

Designation :

Phone No.

Place :

Date :

(Affix Seal of the Organization here, if applicable)

**CERTIFICATE OF ANNUAL TURNOVER & NET WORTH**TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD**TO WHOME IT MAY CONCERN**

This is to certify that the following financial positions extracted from the audited financial statements of **M/s.....**(Name of the Bidder)for the last three (3) completed accounting years upto.....(as the case may be) are correct.

<b>YEAR</b>	<b>TURN OVER</b> In INR (Rs)	<b>NET WORTH</b> In INR (Rs)

Place:

Date:

Seal:

Membership No..

Registration Code:

Signature:



### **SPECIAL NOTES**

- a) Bidders without having E-tender Login ID and Password should complete their online registration at least seven (7) days prior to the scheduled bid closing date and time of the tender. For online registration, Bidder may visit the OIL's E-tender site <https://etender.srm.oilindia.in/irj/portal>
- b) Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.
- c) MSEs Units (manufacturers/Service Providers only and not their dealers/distributors) who are already registered with District Industry Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are exempted from payment of Bid Security (EMD) irrespective of monetary limit mentioned in their registration, provided they are registered for the item they intend to quote/participate.
- d) For availing benefits under Public Procurement Policy (Purchase preference & EMD exemption), the interested MSE Bidders must ensure that they are the manufacturer/ service provider of tendered item(s) and registered with the appropriate authority for the said item(s). Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Therefore, it is in the interest of such MSE Vendors to furnish a copy of complete certificate to the concerned tender handling officer of OIL at least seven (7) days prior to the scheduled Bid Closing Date of the tender; seeking clarification/confirmation as to whether their registered item is eligible for EMD exemption or not. Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company.

**Annexure HHH of SKI 0634 P19/03- Technical Evaluation sheet**

Instruction to Bidders: Bidders should response to each and every clause of the technical specification here under in the space provided in the table below:

Clause No.	Group/sub-group	Details descriptions/specifications	Bidder's Remarks: Complied/Not complied/ Deviation
1.0	General Technical requirement	<p><b>DETAILED SPECIFICATION FOR ALTERNATOR, DIESEL ENGINE AND CONTROL PANEL:-</b></p> <p>Diesel Generating set of capacity 125 KVA complete with Diesel Engine, Alternator, Electric Control Panel and Acoustic Enclosure conforming to the specification given below. Diesel engine and alternator shall be closely coupled (as per manufacturer's standard) and mounted on a base plate of robust in construction (oil-field skid type).</p> <p>DG Set shall meet the requirements of environmental protection rules, 1986 as laid down by Ministry of Environmental &amp; Forest read with GSR 371(E) dated 17.05.2002, GSR 520(E) dated 01.07.2003 , GSR 448(E) dated 12.07.2004 , GSR 771 (E) dated 11.12.2013 &amp; GSR 232 (E) dated 31.03.2014 ,Gazette Notification No. 167 dated. 31.03.2014 and Gazette Notification No. 578 dated. 11.11.2014 amended upto date, in respect of "emission norms" for the engine and in respect of "noise norms" for DG sets.</p>	
2.0	Specification of Alternator	<p>1) Make: KIRLOSKAR/NGEF/STAMFORD/CROMPTONGREAVES/CATERPILLAR/KATO/ GENERAL ELECTRIC USA</p> <p>2) Rated Output : 125 KVA at 0.8 PF at Specified ambient conditions for utility and motor loads</p> <p>3) Rated Voltage : 415 Volts <math>\pm</math> 5%</p> <p>4) Armature Winding : 3 Phase, 4 wire type</p> <p>5) Rated Frequency : 50 Hz <math>\pm</math> 3%</p> <p>6) Rated power factor : 0.8 lagging</p> <p>7) Class of insulation : Class F/H</p> <p>8) RPM : As per engine rated speed</p>	

		<p>9) Phase sequence: UVW - phase sequence and direction of rotation shall be clearly marked on the alternator.</p> <p>10) Duty/load: Continuous duty rated Alternator.</p> <p>11) Winding Connection: Y connected. Separate neutral terminal required</p> <p>12) Ambient : Min: 5 °C Max: 40 °C, RH 95% max</p> <p>13) Alternators Enclosure Protection : IP 23</p> <p>14) Alternators Terminal Box Protection : IP 54</p> <p>15) Excitation system: Brush less, self-excited, self-Regulated with solid state AVR. Voltage characteristics- VG3 as per Table-1, IS-13364 (Part-2)</p> <p>16) Mounting: Foot mounted on Gen set skid that has been mounted on anti-vibration pad.</p> <p>17) Permissible voltage variation: As per Table-1, IS-13364 (Part-2)</p> <p>18) Permissible frequency variation: As per IS-13364(P-2)</p> <p>19) Frame size: Bidder to confirm</p> <p>20) Waveform deviation: As per IS-13364 (Part-2)</p> <p>21) Unbalanced current: As per IS-13364 (Part-2)</p> <p>22) Short circuit current: As per IS-13364 (Part-2)</p> <p>23) Cooling : Air cooled by integral fan</p> <p>24) The brushless alternator shall have exciter and rotating rectifier-bridge mounted on shaft complete with diodes and surge suppressor, main field windings and stator windings. PIV of exciter diodes must be 800v or 8 times the maximum exciter armature operating voltage, whichever is higher. At nominal speed the excitation system must produce sufficient residual voltage in order to ensure self-excitation.</p> <p>25) All windings should be made from electrolytic grade copper of high purity.</p> <p>26) The alternator shaft shall be supported on rolling element bearings at NDE (single bearing) or at both ends.</p> <p>27) Voltage swing (Transient response): As per IS-13364 (Part-2).</p> <p>28) The alternator should be capable of sustaining a 10 % over load for one hour in any 12 hours operation.</p> <p>29) Total voltage harmonic distortion should be less than 3 % between phases at no load.</p> <p>30) The alternator should be capable of withstanding 1.2 times the rated speed for two minutes without any damage.</p> <p>31) Alternator stator winding terminals are to be connected to 4 nos. of suitably rated tinned copper terminals, supported on SMC/GRP supports inside the alternator terminal box.</p>	
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		<p>32) The alternator terminal box should be of suitable size and should be suitable for terminating power cables of alternator.</p> <p>33) 2 nos. of earth points are to be provided on both sides of the alternator.</p> <p>34) Lifting hooks are to be provided for lifting the alternator.</p> <p>35) Automatic voltage regulator should be mounted with approved rubber bushes under AVR mounting holes to reduce vibration. AVR shall be suitable for motor loads, VG3 regulation.</p> <p>36) Alternator windings and AVR should be suitable for humid atmosphere as per ambient conditions mentioned in the enquiry.</p> <p>37) Bidder to mention the following information in offer</p> <ul style="list-style-type: none"> <li>i) Unbalanced current carrying capacity</li> <li>ii) Efficiency of the alternator at 25 %, 50 %, 75 % and 100 % load.</li> <li>iii) Power factor of the alternator at 25 %, 50 %, 75 % and 100 % load.</li> <li>iv) Dimensional drawings.</li> </ul> <p>38) Alternator frame and enclosure shall be as per manufacturer standard.</p> <p>39) The permissible vibration of the alternator shall be as per IS: 12075.</p> <p>40) The alternator shall conform to the following standards: Latest publications of all IS Standards shall be referred.</p> <ul style="list-style-type: none"> <li>IS: 12065 Noise limit</li> <li>IS: 12075 Vibration</li> <li>IS: 4691 Enclosure Protection</li> <li>IS: 6362 Cooling</li> <li>IS: 2253 Mounting</li> <li>IS: 13364 Specification of Alternator coupled with IC Engines</li> </ul>	
3.0	Specification of Control Panel	<p>A separate control panel inside the genset house (acoustic enclosure) shall be provided for mounting of generator circuit breaker, switches/relays, metering, control and protection devices and a changeover switch. The cables from alternator terminal box shall be terminated to the control panel (to MCCB). Outgoing cables from the alternator control panel shall be routed to a changeover switch. Mains supply/alternate supply shall be connected to the other source of the changeover switch. Outgoing cables to load shall be connected to the load terminals of the changeover switch.</p> <p>The detailed description of the panel is as follows.</p>	

		<p><b>Panel construction:</b>  Sheet steel clad, self-supporting, floor mounting, cubicle type, dust and vermin proof generating set control panel made of 2mm thick MS CRCA sheet and built upon rigid framework of channels, beams as required, having front and rear hinged doors with danger plate fitted on both sides, lifting lugs on top, ventilation louvers on both sides, bottom detachable gland plates, double earthing studs on two sides, complete with suitably sized zinc passivated hardware with heavy plain and spring washers. The panel doors should have neoprene rubber gasket. The panel should be designed and manufactured as per IS-8623. The panel enclosure will be as per IP54 except for the open part of cooling louvers at bottom and top of the panel sides. Suitable wire mesh should be provided on the inner side of the louvers to prevent entry of insects. The frame should be able to withstand the stress and vibration during transportation and operation. All cable entry shall be from bottom side. Separate removable gland plates shall be provided for all cables. Provision shall be made in the bottom channel for grouting of the panel.</p> <p>The metal surface of the panel should be thoroughly cleaned and given seven tanks anti corrosion treatment. Then two coats of rust preventive paints shall be applied followed by three coats of paint light grey Shade No. 631 as per IS: 5.</p> <p>The detail description of the components of the panel is as described below:</p> <p>The panel should broadly have the following compartments/sections.</p> <ol style="list-style-type: none"> <li>1) Incomer/Bus bar Section</li> <li>2) Generator Protection Section</li> <li>3) Generator control section</li> <li>4) Engine control section</li> <li>5) Changeover switch (if changeover switch panel is not separately provided)</li> </ol> <p>1) INCOMER/BUS BAR SECTION- MAIN COMPONENTS:</p> <ol style="list-style-type: none"> <li>a) Breaker MCCB: 1 No. 415 V, 250 Amps, 4 pole, MCCB, 36 KA breaking capacity, with inbuilt thermal magnetic adjustable overload &amp; short circuit trip and under voltage trip coil. This is the main circuit breaker. Earth leakage protection shall also be provided through separate CBCT and earth leakage sensing relay. Rotary operating handle shall be provided on the panel</li> </ol>	
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		<p>door for manual operation of MCCB. MCCB shall have suitable indication in case of trip from trip unit of MCCB. Make: Legrand/ Siemens/Schneider Electric/ABB.</p> <p>The MCCB should trip on the following faults:</p> <ul style="list-style-type: none"> <li>i) Over load, short circuit and earth leakage- Tripping from internal trip unit of MCCB</li> <li>ii) Over/under voltage &amp; Over/under Frequency- From voltage and frequency relays</li> <li>iii) Engine fault (Low lube oil, high water temp, over speed)- Trip contact from engine protection system</li> </ul> <p><b>b) Busbars:</b> Panel shall have one set of TP &amp; N electrolytic grade, high conductivity, electro tinned copper bus-bars, made from rectangular sections confirming to IS, rated 400 Amps (Free air rating of sections) and supported at required intervals to withstand short circuit fault levels up to 36 KA for 1 Sec. Rating of neutral bus shall be minimum 50% of phase bus rating. Bus-bar support shall be non- hygroscopic GRP/FRP and the Bus-bar shall be insulated with heat shrinkable PVC sleeves.</p> <p><b>NOTE:</b> The genset shall normally be grounded through an NGR. It is to be noted that though systems fitted with NGR are strictly three wire systems without neutral, the busbars in this panel shall be 4 wire. This is because in some installations NGR may not be available and neutral may be required for some purpose/equipment.</p> <p>However when NGR is used in the neutral ground of the system, the neutral cannot be used for auxiliary 240 VAC phase to neutral supply, instruments and meters in the control panel. Hence isolation transformers shall be used in the supply line of these instruments and meters and auxiliary AC supply where grounding is required. <b>This is very important.</b></p> <p>Incoming and outgoing power cables to/from MCCB shall terminate on electrolytic grade, high conductivity electro tinned copper spreader bar/links liberally sized for termination of all power cables. Neutral bar shall also have provision for connection of neutral earth cables. All cables to the panel will enter through a detachable gland plate at the bottom of the panel. All cables will be terminated through suitably sized single compression glands and connections</p>	
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		<p>will be made through properly rated terminal strips and tinned copper sockets crimped rigidly to the copper conductors.</p> <p>2) Generator Protection Section: This section shall have:</p> <ul style="list-style-type: none"> <li>• Built-in overload (adjustable) short circuit fault (adjustable), instantaneous short circuit- in the MCCB. Earth leakage protection from earth leakage relay with CBCT (Make: Schneider/Legrand/GIC/ProkDVs); ELR shall be adjustable (sensitivity: 0-3 A, time: 0-5 Sec)</li> <li>• 1 No 3 phase, 4 wire, Microprocessor based, Over and Under Voltage Monitoring Relay for the following protections (Make: Schneider (Model RM3 TR114VS7)/ProkDvs( Model- LVM11-34-2CF)/ABB ltd <ul style="list-style-type: none"> <li>a. Over voltage - 110 %</li> <li>b. Under voltage - 85 % with 1- 10 seconds time setting</li> <li>c. Incorrect phase rotation</li> </ul> </li> <li>• 1 No. Over and Under frequency monitoring relay from 40 to 60 HZ with accuracy 0.1%, suitable for 415V Trip time 0-10 Sec with LED indication, 2NO+ 2NC contact, Make: ProkDvs ( Model -HILO-2C-F)/ Minilec (FCS D2)</li> <li>• Suitably rated CTs of 400/5 , class 5P10 for above (Make: Kappa / Konzerv/ L&amp;T)</li> </ul> <p>3) Generator Control Section: This section shall have:</p> <p>a) Meters:</p> <ul style="list-style-type: none"> <li>1 No. Three phase digital AC Voltmeter with selector switch, Size- 96x96 mm, Class of accuracy 0.5, 0 - 500 V, Auxiliary power supply -230VAC (Make: AEL/ Konzerv/ L&amp;T)</li> <li>1 No. Three phase digital AC ammeter with selector switch, Size- 96x 96mm sq. mm, 0-500 Amps, C.T. operated , Auxiliary power supply 230V AC, class of accuracy -0.5 (Make: AEI/ Konzerv/ L&amp;T)</li> <li>1 No. Digital frequency meter, 48 X 96 mm, scaled 0-100 Hz, suitable for 240 V AC operation, (Make: AEL / Konzerv/ L&amp;T)</li> <li>1 No.Digital DC Voltmeter, Size- 96x96 mm, Class of accuracy 0.5, 0 - 50 V (for battery charger)</li> <li>1 No.Digital DC Ammeter, Size- 96x96 mm, Class of accuracy 0.5, 0 -30 A (for battery charger)</li> </ul>	
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		<p>1 No. Multi-Function meter showing Voltage, current, power (KW), Power factor, KWH &amp; Maximum demand, 5 elements of power showing at a glance with communication port compatible to PCs. Make of Meter - Siemens (Sentron PAC 3200)/ SOCOMEC -HPL ( Model -DIRIS A 40/A41)/ Schneider Group (Model- PM700). Bar Primary Resin Cast CT of 200/5 ratio, 15 VA burden, class-1, conforming to IS 2705.No of CTs as per circuit requirement. Make of CT: AEI/ kappa / L&amp;T</p> <p>Suitably rated CTs, CT ratio 200/5, class I for ammeter, kW meter and PF meter (Make: Kappa / Konzerv/ L&amp;T.)</p> <p>All meters shall be mounted in front of the panel.</p> <p>b) Indications: Indications for the following are to be provided:</p> <ul style="list-style-type: none"> <li>i) Engine running</li> <li>ii) Power supply on for R, Y &amp; B phases</li> <li>iii) Trip circuit healthy</li> <li>iv) Electrical fault (From aux contact of trip unit of MCCB)</li> <li>v) Engine fault</li> <li>vi) Set on load</li> </ul> <p>All indication lamps shall be of LED type (Make: Binay/ Technic/ L&amp;T) and shall be mounted in front of the panel. A separate annunciator window (multi-window) with audible alarm for showing various engine and alternator faults shall also be provided.</p> <p>Push buttons for acknowledging/ resetting alarms, checking healthiness of trip circuits etc. shall also be provided.</p> <p>c) Fuses: All meters, indication lamps shall be protected by adequate nos. of HRC instrument fuses of suitable rating (Make: GEPC / Siemens/ L&amp;T).</p> <p>d) Auxiliary relays: i) Auxiliary Relays /Contactors will be provided as per requirement of the control circuits. (Make: Siemens/Schneider/ABB/BCH/L&amp;T/Indo-Asian).All relays should have minimum 2 nos. spare contacts. No. of relays should be as per the control circuit</p>	
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		<p>requirement. Plug in type relays and contactors shall not be used. Current rating of aux contacts shall be as per control circuit requirement.</p> <p>ii) HRC instrument fuse holders phenol moulded with suitable fuses &amp; links for different circuits. Separate fuses and neutral links should be provided for control circuit indicating system lamps, instruments, enclosure illumination and tripping circuit (Make-GE).</p> <p>4) Engine control section: This section shall have:</p> <p>Digital RPM meter -1 No.  Engine alarm and trip condition monitoring  Engine start/stop controls  Battery charger circuit  Emergency stop switch (mushroom head type)- to be placed outside the acoustic enclosure</p> <p>The following engine conditions should give alarm indication:</p> <p>i) Low lube oil pressure (low set point)  ii) High water temp. (low set point)  iii) Engine over speed (low set point)  iv) High Exhaust Temperature  v) Low battery voltage</p> <p>In addition, engine should be stopped with the help of heavy-duty 24V D.C. fuel solenoid on following trip conditions.</p> <p>a) Low lube oil pressure (high set point)  b) High water temp. (high set point)  c) Engine over speed (high set point)  d) High Vibration</p> <p>Indication of each of the trips shall be provided in the front multi-annunciator window of the Engine control section. Suitable relay/ timer arrangement shall be provided wherever required. Push buttons shall be provided for:</p>	
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		<ul style="list-style-type: none"> <li>(a) Accept fault</li> <li>(b) Reset alarm</li> <li>(c) Engine start/ stop</li> <li>(d) Lamp test</li> </ul> <p>Hooter/alarm to indicate Engine trip on fault</p> <p>All indication/metering/controls shall be mounted in front of the panel.</p> <p><b>B.1. CHANGE OVER SWITCH:</b></p> <p>Output from the control panel bus bars shall be terminated on a changeover switch. Outgoing cable of the genset shall be connected to the outgoing side of the changeover switch. The other incomer of the changeover shall be reserved for connection to the mains supply. Description of the changeover switch is as follows:  One no. four pole on load changeover type switch rated for 300 Amp. The switch shall be mounted on the genset skid with suitable enclosure (or inside the control panel). Connection links/spreader bars shall be provided with switch for proper termination of all power cables. Power wiring from control panel to COS shall be done by the manufacturer. Sufficient space and arrangement shall also be provided in COS enclosure for entry and termination of main power cable to user load centre. The power cable shall be suitably rated PVC insulated, PVC sheathed, armored cable with copper conductor. Make of switch: HPL- Socomec/GE/Siemens.</p> <p><b>B.2. MOTOR STARTER PANEL</b></p> <p>Manufacturer shall also provide starter panels along with necessary cables for any motors provided with the genset necessary for operation, such as lube oil circulation, radiator cooling fans, enclosure ventilation fans etc. The starter panels shall be inside the acoustic enclosure and complete with breakers (isolation), contactors, thermal overload relays, auto-starting /local starting facilities, indication lamps etc.  Control panel shall preferably be manufactured by the Genset Manufacturer.</p>	
4.0	Wiring Scheme	<p><b>CABLES AND WIRING SCHEME</b></p> <p>All power and control cables in the genset up to the outgoing terminals of the changeover switch shall be of multi-stranded copper conductor. In case cooling motors/other auxiliary motors are</p>	

		<p>provided outside the genset/acoustic enclosure, the power and control cables leading to these motors shall also be multi-stranded copper cables.</p> <ul style="list-style-type: none"> <li>i) Control system wiring:. Control system wiring shall be done with 1.5 sq mm, flexible multi-stranded copper, 1100V grade PVC insulated wires approved by ISI, TAC, FIA. All wiring will have copper lugs &amp; terminal blocks as required. Wiring for lighting circuit MCB, power outlet and wiring for CT will be done with 2.5 sq mm, flexible copper, 1100 V grade PVC insulated wires approved by ISI, TAC, FIA&amp; have copper lugs. Colour code for wires shall be followed as per IS. Make: Finolex/Havells/ L&amp;T/Polycab/Necab.</li> <li>ii) All power cabling inside the enclosure shall be done at manufacturer's works with armored multi-core cables or with single core cables laid in metallic flexible conduits/ casings. Heavy duty single compression cable glands shall be provided at all cable entries for cables. Cables with conduit wiring shall have suitable entry clamp. All cables shall be of 1100V grade and approved by ISI.</li> <li>iii) All control cable terminal ends will have suitable heavy duty crimping lugs of tinned copper. Wires for CT and ammeter connections shall have ring type lugs. Ferrules shall be provided for identification of cables. All components shall be labeled for identification.</li> <li>iv) Separate gland plates shall be provided for power and control cables.</li> <li>v) Separate TB shall be provided for all interconnection cables between control panel and engine.</li> <li>vi) Provision of exhaust blower power supply shall be required if the blower is fitted inside the acoustic enclosure.</li> <li>vii) Power supply arrangement with switching and protection shall be also be provided for any auxiliary motor, if installed for genset operation.</li> <li>viii) All auxiliary and main contactors shall be mounted on DIN channel. Plug in relays shall not be used.</li> <li>ix) Engine control wiring will run from engine to control panel in heavy duty ISI approved galvanized flexible conduit supplied by the party.</li> </ul>	
5.0	Enclosure illumination and power outlet	<p>The acoustic enclosure will have three nos. of LED/CFL/FTL luminaires (preferably bulkhead type fittings) suspended from enclosure top and wired with heavy duty PVC insulated and PVC sheathed armoured, stranded copper cable. Lights will be switched from individual MCBs, 6 Amp, C curve, mounted on control panel cover &amp; have back-up HRC fuse and neutral link of 16 amp rating. One no. industrial type metallic plug socket of 20amp rating with 10 Amp SP MCB as switch</p>	

		<p>should also be fed from lighting circuit fuse. The socket should be mounted on the enclosure side. Power for lighting circuit and socket outlet should be taken from the main bus. Make: Philips/Crompton/Havells for luminaire.</p>	
6.0	Earthing	<p>1) The earthing scheme for the unit should be as per IS-3043. Two nos. 50x5mm GI straps (earth bus) shall be suitably fixed on the unit skid. Galvanisation thickness should be min. 85 micron and as per IS. Alternator earth terminals, control panel earth terminals, enclosure and skid shall each be connected with two nos. separate earth cables/GI straps to both the main earth bus with independent connections at separate points. 30 x 6 mm GI strap or heavy duty PVC insulated, PVC sheathed, flexible, single core, IS approved copper cables of 25 sq mm size shall be used for each earth connection. The neutral of the alternator will be routed to an NGR (not in scope of this tender) by connecting two nos. of earthing cables from neutral bus inside the control panel to the NGR. Cables from the neutral bus to NGR shall be in the scope of supplier (minimum 25 mm<sup>2</sup> single core PVC sheathed PVC insulated multi-stranded copper cable, each minimum 10 m long). However if NGR is used, NGR to grounding electrode cable/GI strap shall be provided by OIL. Suitable provision is required in the panel base plate for safe entry of earth cable. All cables are to be terminated with lugs and suitably protected against mechanical damage. Earth cables shall be protected to avoid any damage and to be run in galvanized, flexible MS conduit.</p> <p>2) Both the main earth straps/earth bus shall extend up-to the back side of the enclosure and each strap will have two nos. of zinc coated terminal studs, 15mm dia are to be provided at end of the straps for connection to system earth. Two nos. of earthing cables/GI straps of size &amp; type mentioned in point no.2 above shall be provided and connected to these two straps for external earthing. The free ends of these cables/straps shall be crimped with heavy duty, tinned copper tubular lugs. Suitable opening with hinged cover shall be provided in the rear side of the unit to facilitate the entry of outgoing power cable and earth leads.</p> <p>3) Each of the external earthing cables/straps shall be connected to two nos. separate earth electrodes. The earth electrodes shall be chemical filled type of size OD minimum 88 mm and length 3 metres. Suitable mineral backfill compound of the same make as electrodes shall be used in the pit for burying the electrode.</p>	



		<p>4) Two nos. identical electrodes shall also be provided for generator neutral/NGR earthing. (Total 06 nos. electrodes).</p> <p>5) Supplier shall arrange for protection of earth electrodes with RCC or mortar and brick enclosure. The enclosure shall have RCC or FRP/chequer plate cover. Any other item required for the job but not specified shall be supplied by party without any cost to OIL.</p>	
7.0	Documents -Electrical	<p>1. The following Documents / drawings shall be submitted with the offer:</p> <ul style="list-style-type: none"> <li>i) GA and schematic drawings of alternator and control panel</li> <li>ii) Technical literature of alternator</li> <li>iii) Confirmation that the party agrees to all the points mentioned under electrical specification of generating set. Any deviation from the electrical specifications of the tender will be specifically mentioned by the party with proper justification. Acceptance of deviations shall be at discretion of OIL. Type and make of components shall be as per tender. However OIL may consider equivalent makes on the basis of individual merit and OIL's discretion. The bidder shall also specifically confirm even if there is no deviation in their offer from technical specifications.</li> </ul> <p>2. The successful bidder shall obtain approval for the following drawings / documents prior to manufacturing of alternator &amp; control panel within 30 days of placement of order.</p> <ul style="list-style-type: none"> <li>i) GA drawing of alternator, control panel and acoustic enclosure</li> <li>ii) Detailed power &amp; control wiring diagram of control panel, changeover switch panel (if separately supplied to control panel), earthing schematic</li> <li>iii) Layout plan of the unit showing all parts, cable routes</li> <li>iv) Details of power cables, control cables and their routes in the enclosure</li> <li>v) Bill of materials of all components</li> <li>vi) Illumination scheme</li> <li>vii) Documentary evidence from the manufacturer of generator confirming that the alternator to be supplied will meet all specifications as mentioned in the order.</li> <li>viii) Technical catalogue of the generator</li> </ul> <p>3. Three sets of following as built documents per gen set shall be submitted in bound form</p> <ul style="list-style-type: none"> <li>i) GA drawing of alternator, control panel and acoustic enclosure</li> </ul>	

		<ul style="list-style-type: none"> <li>ii) Detailed power &amp; control wiring diagrams (“as-built”), schematic diagrams, detailed enclosure drawings for control panel, earthing schematic</li> <li>iii) Scheme, layout plan of the unit showing all parts</li> <li>iv) Details of power cables, control cable and their routes</li> <li>v) Bill of materials of all components</li> <li>vi) Technical literature of alternator</li> <li>vii) O&amp;M manual for Alternator and main components of control panel</li> <li>viii) Catalogues of various components</li> <li>ix) All test certificates for tests done at manufacturer's works for alternator, control panel and complete unit</li> <li>x) Tests done during commissioning</li> <li>xi) Guarantee certificate for alternator and control panel. Guarantee shall be for 12 months after commissioning of Gen set or 18 months after supply, whichever is earlier.</li> <li>xii) List of recommended spares with cat nos. and description for two years</li> </ul>	
8.0	General Notes for Electrical Items and Works:	<ul style="list-style-type: none"> <li>1) In case of an order the complete electrical specification of the tender shall be mentioned in the order. However, deviations from tender specifications, if mentioned by bidder in their offer and if accepted by OIL in writing, shall also be mentioned in the order.</li> <li>2) In the event of an order the bidder will submit all documents as per Para 2 under DOCUMENTS for OIL's approval.</li> <li>3) The manufacture of the unit shall start only after written approval of the drawings/ documents (as per Para 2 for Documents) by OIL.</li> <li>4) In case party cannot submit documents complying with all points mentioned in the order then the order will be cancelled without any obligation on part of OIL.</li> </ul>	
9.0	Prime mover	<p>(1) The Diesel Engine shall be 4-stroke, In-line with individual cylinder head for each cylinder, water cooled, electric start, developing BHP (not less than 155 BHP gross) at 1500 RPM suitable for prime mover of alternator with output of 125 KVA at 3 phases, 0.8 power factor, 415 Volt when running at 1500 rpm under NTP conditions and rated for Prime Duty and G3 Performance Class as per ISO: 8528-5 standard. The engine should be suitable for 75% average 24-hour load factor duty.</p>	

		<p>(2) The diesel engine should conform to standards ISO3046/BS5514/ IS: 10,000 series (with latest Amendments) and should be capable of providing 10% overload for one hour in every 12 hours continuous running at full load. Specific fuel consumption (SFC) shall be as per IS specification.</p> <p>Note: These technical data in Clauses (1) &amp; (2) should be clearly mentioned in the engine/generator manufacturer's standard catalogue and website for verification (if required).</p> <p>(3) The Diesel engine shall be complete with the following accessories :</p> <ul style="list-style-type: none"> <li>(a) Fuel tank with air breather, drain plug with capacity for 12 hours of continuous running at full load.</li> <li>(b) Engine instrument panel consisting of starting switch with key, lube oil temperature and pressure gauges, RPM indicator and hour meter at the minimum.</li> <li>(c) Safety control to shut down the engine in the event of over-speed, low lube oil pressure and high engine water temperature.</li> <li>(d) Exhaust silencer: Industrial Type.</li> <li>(e) 12 V or 24 V starting system complete charging alternator.</li> <li>(f) Lead Acid/ maintenance free batteries of suitable ratings with connecting cables. The batteries shall be supplied in charged condition and shall conform to relevant IS. Only, the following make of batteries shall be accepted- Exide/ Cummins / Bosch/ Lucas.</li> <li>(g) Anti-Vibration mountings for complete DG set.</li> <li>(h) The fuel level should be indicated with the help of fuel gauge meter.</li> <li>(i) There should be provision for filling the fuel from outside (as in case of automobiles) with locking arrangement.</li> </ul>	
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		(j) Engine Governing Class: G3 (As per ISO8528-5). Governor should be Mechanical or Electronic to provide G3 Performance Class.	
10.0	Spare Parts for two year operation and maintenance	<p>Bidder has to confirm the availability of all the spares for the complete Gen Sets for minimum 10 years from the date of delivery of materials.</p> <p>The following spares should be supplied as MANDATORY SPARES along with the complete package <b>(The cost of the same to be included in the main offer)</b></p> <p><b>(a) Engine Spares:</b></p> <ul style="list-style-type: none"> <li>(i) Fuel filter - 06 nos (per genset)</li> <li>(ii) Lub. oil filter - 06 nos (per genset)</li> <li>(iii) Air filter- 06 nos (per genset)</li> <li>(iv) Complete Set of Belts – 04 Sets (per genset)</li> <li>(v) Coolant: 60 L for each engine (apart from the coolant for genset commissioning)</li> </ul> <p><b>(b) Electrical Spares:</b></p> <ul style="list-style-type: none"> <li>i) AVR Unit for Alternator- One no. per Gen Set</li> <li>ii) Rotating rectifier assembly fitted with complete set of forward and reverse diodes and varistor/surge protector- One set per Gen set</li> <li>iii) 250 Amp MCCB with door mounted operating handle as fitted in control panel- One no. per Gen set</li> <li>iv) 300 Amps changeover switch (as mounted)- One no. per Gen set</li> <li>v) Bearings: One complete set per Gen set</li> </ul> <p>Note: The above spares are to be separately packed and forwarded to CGM- FIELD ENGINEERING, OIL INDIA LIMITED, DULIAJAN- 786602, ASSAM, clearly indicating the OIL's Purchase order no. and the description.</p>	
11.0	Acoustic Enclosure	<p>The Acoustic Enclosure shall conform to the drawings TYPE approved by a Govt./NABL lab., for conformity to noise norms. This aspect shall also be verified by OIL's official at the time of pre-dispatch inspection. The OIL official shall tally the enclosure offered with the approved drawing.</p> <p>The Acoustic enclosure should consist of following:</p> <ul style="list-style-type: none"> <li>(a) The enclosure should be fabricated out of CRCA sheet of minimum 1.6 mm thick.</li> </ul>	

		<p>(b) The sheet metal components should be suitably pretreated and should be powder coated to have long life of enclosure.</p> <p>(c) The battery should be accommodated in a separate tray in the enclosure.</p> <p>(d) There should be provision of drain plugs for draining lube oil and diesel.</p> <p>(e) The doors should be gasketed with quality gaskets to avoid leakage of sound.</p> <p>(f) The door handle should be lockable type.</p> <p>(g) Sound proofing of enclosures should be done with high quality rock wool/ mineral wool/foam/fiberglass wool.</p> <p>(h) The rock, mineral, fiberglass wool is further covered with fiberglass cloth and perforated powder coated sheet.</p> <p>(i) An industrial silencer should be provided along with the enclosure to control exhaust noise.</p> <p>(j) Specially designed louvers should be provided to control sound at air entry to the container and exit from the container.</p> <p>(k) It should have Type approval certificate and also COP certificate (if applicable) from certification agencies mentioning MOEF notification No.371(E) dated 17.05.2002 or as amended and applicable at the time of supply.</p> <p>(l) Ambient temperature limit inside the canopy should be specified.</p> <p>(m) There shall be provision for emergency STOP from outside the enclosure.</p> <p>(n) Genset/Engine control panel should be visible from outside the enclosure.</p> <p>(o) Sufficient space should be available around the Genset. Routine/periodical check on engine/alternator (filter replacement and tappet setting etc.) should be possible without dismantling acoustic enclosure.</p> <p>(p) It should be easily dismantled for removing the engine or alternator for major repair.</p> <p>(q) Acoustic Enclosure shall conform to pollution noise norms stipulated in notification GSR 371(E) dated 17.05.2002, amended upto date.</p> <p>(r) Dimension: 4000 X 1350 X 1900 (approx.)</p>	
12.0	Pre-Dispatch Inspection	The testing of the DG sets shall necessarily be carried out at factory/manufacturer premises in presence of representative of OIL. The party will arrange staff/fuel/ <u>POL</u> for test run at his cost. For testing, following procedure will be followed:	

		<ul style="list-style-type: none"> <li>i) All major items/equipment i.e. engine &amp; alternator in assembled condition, associated electrical control panels etc. shall be offered for inspection and testing at factory/manufacturers works.</li> <li>ii) All routine tests of the alternator and control panel (if required) shall be witnessed during the inspection at respective manufacturer's works.</li> <li>iii) The party will give a notice of minimum two weeks for carrying out such tests. OIL/or its authorized representative shall witness such inspection &amp; testing at mutually agreed date.</li> <li>iv) Inspection/testing charges, if any, shall be quoted separately which shall be considered for evaluation of the offers. To and fro fares, boarding/ lodging and other en-route expenses of OIL's Inspection team for carrying out inspection shall be borne by OIL.</li> <li>v) OIL also reserves the right to inspect the fabrication job at factory and the successful tenderer has to make arrangements for the same.</li> <li>vi) The party shall provide the testing facilities for the following tests in their works at the time of inspection: <ul style="list-style-type: none"> <li>a) The testing of diesel generating sets shall be done with a load of 0.8 pf lag or unity power factor.</li> <li>b) The facility for checking of alignment of DG set before subjecting to load test for which tolerance is 0.01 mm in case of flexible coupled DG set and not applicable for direct coupled.</li> <li>c) Full load test for 4 hours at rated KW at 0.8 pf lag.</li> <li>d) After 4 hours full load test, 10% overload test shall be conducted for one hour at 0.8 pf lag. DG set should be capable of running at full-load test for one hour, after the overload test. The parameters should meet the requirements at full load, conducted after the over-load test.</li> <li>e) Checking for the trouble free starting and oil leakage.</li> <li>f) Vibration test: Vibration below AVM's should not exceed 100 microns.</li> </ul> </li> <li>vii) The testing will be declared successful only when no abnormality/failure is noticed during the testing.</li> <li>viii) The DG set will be cleared for dispatch to site only when the testing is declared successful by OIL.</li> </ul>	
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13.0	Documents to be provided at the time inspection	<p>The party should provide following documents to the visiting OIL's official at the time of inspection:</p> <ol style="list-style-type: none"> <li>1) DG Sets manufacturer's shall furnish invoices and OEM's test certificates for the engine/alternators used, at the time of inspection from the original manufacturer. The Invoice should have been billed directly to DG sets manufacturer. Original will be shown to the visiting inspector for verification during inspection.</li> <li>2) Valid Calibration certificates of all the testing meters from any Govt. /NABL accredited Lab.</li> <li>3) Complete &amp; satisfactory Type Test certificate (TTC) for the diesel engine, alternator complete with enclosure to be used by them for the DG set clearly identifying make, model and rating of the DG set tested to be submitted to the visiting OIL official at the time of pre dispatch inspection.</li> <li>4) The endurance tests carried out by engine manufacturers on their own test beds and under their own supervision. The self-certified copies ( i.e certified by engine manufacturers) of these tests shall be submitted by firms for inspection.</li> <li>5) Apart from above , the supplier shall also furnish test reports for Rating Tests conforming compliance with relevant IS standard (with latest amendments) , covering governing speed , specific fuel consumption , Lube oil consumption &amp; Exhaust temperature tests for the engine carry out by the engine manufacturer at their own test bed.</li> <li>6) Type approval certificate for "emission norms" for engine from certification agency as per notification no.GSR 371(E) dated 17.05.2002 amended up to date.</li> <li>7) Type approval certificate of DG set for "noise norms" with turbo engine model combination from certification agency as per notification no.GSR 371(E) dated 17.05.2002 amended upto date.</li> <li>8) Routine Test certificate of engine, alternator and control panel under supply.</li> </ol>	
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		<ul style="list-style-type: none"> <li>b) A copy of valid formal agreement between diesel engine manufacturer and DG set manufacturer, ensuring steady supply of engines, should be submitted to the visiting OIL official at the time of inspection.</li> <li>c) Firms shall submit calculation sheet, showing engine BHP required for declared rating of DG Sets.</li> <li>d) COP and TAC with make and model of engine and DG sets shall also be submitted at the time of inspection.</li> <li>e) Firms shall declare the details of combination of engine and alternator along with make and model of the DG Set rating.</li> <li>f) The scope for installation and commissioning of DG sets is mentioned elsewhere in this tender.</li> <li>g) DG set and diesel engine shall meet the specified norms (upto date) of Central Pollution Control Board. They shall submit certificate in this regard.</li> <li>h) Necessary gauges/meter shall be installed to indicate the quantity of diesel input, quantity of diesel consumed and the number of hours of DG set operation.</li> <li>i) Firms shall indicate specific fuel consumption for the DG set.</li> <li>j) All metal surfaces shall be thoroughly cleaned and degreased. The under surface shall be prepared by applying a coat of phosphate paint and a coat of yellow zinc chromate primer. After preparation of under surface, the panel shall be spray painted with two coats of epoxy based final paint. Panel finish shall be free from imperfections like pin holes orange peels, run off paint etc.</li> <li>k) The components of the complete generating sets shall be of such design so as to satisfactorily function under all conditions of operation.</li> <li>l) The entire work of manufacture/fabrication, assembly and installation shall conform to sound engineering practice. The entire installation shall be such as to cause minimum transmission of noise and vibration to the building structure.</li> </ul>	
14.0	Skid	A base plate of robust in construction (oilfield type) with lifting-hook for lifting the Complete DG set including the Acoustic Enclosure. It should be rugged in construction and designed for mounting engine coupled with alternator, with cross members mounted on requisite number of suitably designed Anti Vibration Mountings (AVM's).	

15.0	Painting, Quality of materials and workmanship	All equipment and materials to be used in work shall be manufactured in factories of good reputation having excellent track record of quality manufacturing, performance and proper after sales service.	
16.0	Installation and Commissioning of the Units	<ul style="list-style-type: none"> <li>a) Installation and Commissioning of the generating sets, control panels mounted on skid shall be carried out by the party at <b>site (Manabhum) in Arunachal Pradesh (India).</b></li> <li>b) Services of qualified and competent personnel from equipment manufacturer are essential during installation and commissioning of the generating sets.</li> <li>c) Persons engaged for installation, testing and commissioning of alternator and control panel should have valid electrical license issued by State Licensing Board. A person who is authorized for supervision of all electrical works should have valid supervisory license.</li> <li>d) External power cable from control panel of the unit to the load center shall be provided by OIL and the party will connect the same to the genset control panel. Party shall also connect the alternator earth points and enclosure earth points of the unit to OIL's earth system with cable/GI strip etc.</li> <li>e) Materials such as line pipes, fittings necessary for fabricating fuel/ water lines (if required), supports for engine exhaust shall be provided by OIL. However bidder has to arrange welding and cutting facilities that may be required during installation and commissioning the generating sets.</li> <li>f) OIL will provide necessary statutory permits for welding and cutting jobs in classified areas as and when required.</li> <li>g) Installation / commissioning charges work should be quoted separately which shall be considered for evaluation of the offers. These charges should be included amongst others: to and from fares, boarding/ lodging and other expenses of the commissioning engineers during</li> </ul>	

		<p>their stay at Manabhum in Arunachal Pradesh (India). Bidders should also confirm about installation/ commissioning in the Technical Bid giving the scope of work.</p> <p>h) The genset will be treated as successfully commissioned from electrical side after successful load test of the unit at OIL's field site with available load for 72 hrs and submission of all documents and all spares as per Purchase Order.</p>	
17.0	Documents to be attached with the final shipment	<p>The supplier shall submit detailed records and certificates of the foregoing tests to the purchaser. The certificates/records shall be supplied in quadruplicate and those for electrical equipment shall be endorsed suitable for use in the climatic conditions specified.</p> <p>The following documents [<b>at least 04 bound sets</b> (if not specified otherwise hereunder)] are to be separately packed and forwarded to GM- FIELD ENGINEERING, OIL INDIA LIMITED, DULIAJAN- 786602, ASSAM, clearly indicating the OIL's Purchase order no and the description.</p> <p>(1) Complete Operating Instructions- with description and illustration of all switchgear controls and indicators and engine and generator controls. Draft copy of the same to be submitted to OIL's inspection team during the time of pre-dispatch inspection for approval.</p> <p>(2) Parts Books- that illustrate and list all assemblies, subassemblies and components.</p> <p>(3) Preventive Maintenance Instructions- on the complete system that cover daily, weekly, monthly, biannual, and annual maintenance requirements and include a complete lubrication chart.</p> <p>(4) Routine Test Procedures- for all electronic and electrical circuits and for the main AC generator.</p> <p>(5) Troubleshooting Chart- covering the complete generator set showing description of trouble, probable cause and suggested remedy.</p> <p>(6) Recommended Spare Parts List- showing all consumables anticipated to be required during routine maintenance and test.</p> <p>(7) Wiring Diagram and Schematics- showing function of all electrical components.</p> <p>(8) Set of drawings showing installation details of the generating set, oilfield type skid, wiring diagram for the control panel ( inclusive of float charger ) and wiring drawing between the alternator and control panel should be provided with each generating set. All control panel diagram and schematic diagram are to be sent to us before supply of order materials.</p> <p>(9) Warranty documents, test certificates, requisite certificates as specified and all other relevant documents specified in OIL's purchase order.</p> <p>(10) <b>Four (04) sets</b> of following documents in bound form:</p>	

		<ul style="list-style-type: none"> <li>(i) GA drawing</li> <li>(ii) Detailed power &amp; control wiring diagram, detailed enclosure drawings for control panel, earthing</li> <li>(iii) Scheme, layout plan of the unit showing all parts.</li> <li>(iv) Details of power cables, control cable and their routes.</li> <li>(v) Bill of materials of all components.</li> <li>(vi) Technical literature of alternator.</li> <li>(vii) Composite O&amp;M manual of the generator covering all sub-systems.</li> <li>(viii) Catalogues of various components.</li> <li>(ix) Part Manuals of Engine and Alternator.</li> <li>(x) All test certificates for tests done at manufacturer's works for alternator, control panel and complete unit.</li> <li>(xi) Tests to be done during commissioning.</li> <li>(xii) Guarantee certificate for alternator and control panel. Guarantee shall be for 12 months after commissioning of genset or 18 months after supply, whichever is earlier.</li> <li>(xiii) List of recommended spares for two years including part nos and descriptions.</li> </ul>	
18.0	Service and Warrantee/ guarantee	<ul style="list-style-type: none"> <li>a) The manufacturer (engine) shall have authorized dealers who can immediately provide factory trained servicemen, the required stock of replacement parts, technical assistance, and warranty administration.</li> <li>b) It shall ensure adequate and prompt after sales service free of cost during guarantee/warrantee period, and against payment after the guarantee/warrantee period is over, in the form of maintenance, spares and personnel as and when required during normal life span of the equipment and shall minimize the breakdown period.</li> <li>c) The guarantee / warranty period for the Gen set and ancillary equipment should be a minimum of 18 months from the date of dispatch/ shipment or 12 months from the date of commissioning of the equipment whichever is earlier.</li> <li>d) All equipment shall be warrantee/ guaranteed, against unsatisfactory performance and/or break down due to defective design, workmanship or material. The equipment or components, or any part thereof, so found defective during warrantee/guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of OIL. In case it is felt by OIL that undue delay is being caused by the supplier in attending the defect/fault removed, the same will be fixed by OIL and the cost of it will be booked to the supplier. The decision of OIL in this regard shall be final.</li> </ul>	

19.0	BEC/BRC Clause for 125KVA DG Set	<p>The bid must conform to the specifications and terms and conditions given in the enquiry. Bid will be rejected in case the items offered do not conform to all the required technical parameters stipulated in the technical specifications and to the respective international / national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected.</p> <p><b><u>A. BID REJECTION CRITERIA (TECHNICAL)</u></b></p> <p><b>(1)</b> The diesel engine shall conform to IS10000/ISO 3046/BS 5514 standards (amended up to date) in design and shall meet the latest norms of the Environment (protection) Act 1986 (CPCB II) for emission and noise level. The bidder shall furnish Type Approval and Conformity of Product certificates from the authorized agencies for certification.</p> <p><b>(2)</b> The rated output of the diesel engine shall be not less than 155 BHP (gross) at 1500 RPM and STP condition and it should be suitable for driving a generator rated for 125KVA output Prime Duty and G3 Performance Class as per ISO 8528-5.</p> <p>Note: Bidder shall provide standard manufacturer's catalogue as documentary evidences in support of the engine/generator ratings specified in clause (2) above.</p> <p><b>(3)</b> The offered engine (Make &amp; Model) must be proven in generator set application and the bidder shall furnish documentary evidence of PTR (proven Track record) with the technical bid.</p> <p><b>(4)</b> Bidder shall be an Original Equipment Manufacturer or its authorized dealer of any of the following items offered:</p> <ul style="list-style-type: none"> <li>a) Generating set</li> <li>b) Engine</li> <li>c) Alternator</li> </ul> <p>Note:</p>	
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		<p>are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year..... (as the case may be) has actually not been audited so far'.</p> <p><b>Note:</b> (a) For proof of Annual Turnover &amp; Net worth any one of the following document must be submitted along with the bid:-</p> <p>i) A certificate issued by a practicing Chartered/ Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover &amp; Net worth as per format prescribed in <b>ANNEXURE-B</b>.</p> <p>OR</p> <p>ii) Audited Balance Sheet along with Profit &amp; Loss account."</p> <p>b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.</p> <p><b>Note: The original Bid Closing date shall be considered by OIL for evaluation of BRC Criteria even in case of any extension of the original Bid closing date. Bidders to quote accordingly</b></p>	
20.0	Gen-set data to be furnished	Description of required data	
	1.00	Engine for Generating Set (Firms shall also specify Model No. of D.G.Set)	
	1.01	Maker's name	
	1.02	No. and arrangement of cylinders	
	1.03a	Cylinder bore and stroke(inches)	
	1.03b	Cylinder bore and stroke(mm)	

	1.04	Method of starting -12/24V DC	
	1.05	Rated RPM- 1500	
	1.06	Rated output at NTP as per IS: 13018/1990(reaffirmed 2005) and IS: 10,000 series.	
	1.07	Compression ratio	
	1.08	compression pressure PSI	
	1.09	Max cylinder pressure PSI	
	1.10	Time required for starting from cold (in seconds)	
	1.11a	Type of governor -Electronic/mechanical	
	1.12a	Guaranteed limits governing Permanent variation-Full load thrown on	
	1.12b	Guaranteed limits governing Permanent variation-Full load thrown off	
	1.12c	Guaranteed limits governing Temporary variation-Full load thrown on	
	1.12d	guaranteed limits governing Temporary variation-Full load thrown off	
	1.13	Recommended specified fuel:	
	1.14	Specification of Lube oil	
	1.15	Over load for one hr at standard operating condition-	
	1.16a	Specific fuel oil consumption under NTP in gms/bkw-hr at full rated output	
	1.16b	Specific fuel oil consumption under NTP in gms/bkw-hr at 3/4 rated output	
	1.16c	Specific fuel oil consumption under NTP in gms/bkw-hr at half rated output	
	1.17	Guaranteed lube oil consumption at full rated output in gms/bkw-hr	
	1.18	Mechanical efficiency	
	1.19	Thermal efficiency	
	1.20	Details of standard accessories offerd with engine	
	1.21a	Safety protection -HWT	
	1.21b	Safety protection-Low lube oil pressure trip	
	1.21c	Safety protection-Over speed trip	
	1.22	Direction of rotation looking from engine towards the driven machine-	
	1.23	No. of strokes-	
	1.24	Method of aspiration-	
	1.25	Method of cooling	
	1.26	Fuel tank capacity	
	1.27	Engine BHP to suit for prime mover DG rating with 10% overload capacity	



	2.00	AC Generator(Alternator)	
	2.01	Maker's name	
	2.02	Rated continuous max. KVA to IS:13364(Part-2)/1992 (Reaffirmed 2008) at NTP	
	2.03	Power factor - 0.8 PF lag	
	2.04	Rated Output in KW at specified power factor(pf)	
	2.05	Governing specification-	
	2.06	Type of enclosure -	
	2.07	Speed in RPM-	
	2.08	Frequency in Hz-	
	2.09	Rated voltage-	
	2.10	No. of phases-	
	2.11	Current carrying capacity of AC winding in amps	
	2.12	10% over load capacity for hrs-	
	2.13	50% over current capacity for seconds-	
	2.14	Temp. rise of winding-	
	2.15a	Class of insulation for main stator	
	2.15b	Class of insulation for main Rotor-	
	2.16a	Efficiency at rated pf at 100% of full load-	
	2.16b	Efficiency at rated pf at 75% of full load-	
	2.16c	Efficiency at rated pf at 50% of full load-	
	2.17	Voltage regulation from no load to full load and at specified power factor with 4% speed regulation of engine of VG-3 grade	
	2.18	Damper windings fitted on poles	
	2.19	Radial clearance between stator and rotor in mm	
	2.20	Critical speed of rotor	
	2.21	Direction of rotation	
	2.22	Method of lubrication	
	2.23	Type and make of excitation unit	
	2.24a	Excitation at rated pf -Field voltage(Volts)	
	2.24b	Excitation at rated pf -Field current(amps)	
	3.00	<b>Electric Control Panel</b>	
	3.01	Maker's name	

	3.02	Rated KVA	
	3.03	Voltage	
	3.04	Degree of protection-	
	3.05	Frequency-	
	3.06	No. of phases-	
	3.07	Current carrying capacity	
	3.08	10% Over load capacity in hrs-	
	3.09	MCCB/ACB/Contactor's make	
	3.10	MCCB/ACB in amps	
	3.11	Ammeters,Voltmeters, Hz Meter, PF Meter, KWH Meter	
	3.12	Type of meters , Digital/Analog-Digital	
	3.13	Dimensions	
	4.00	Acoustic Enclosure	
	4.01	Thickness of CRCA sheet (1.6 mm ,Min.)	
	4.02	CRCA sheet suitably pre- treated or not	
	4.03	Enclosure powder coated or not	
	4.04	Fuel level indicator	
	4.05	Thickness of Rockwool/Mineralwool/Fibre glass wool / foam	
	4.06	Thickness of perforated sheet	
	4.07	Thickness of foam	
	4.08	Density of rock, fibre glass /Mineral wool	
	4.09	Noise level -75 db(a) at 1 meter	
	4.10	Certificates no. for noise norms and emission norms compliance	
	4.11	Acoustic enclosure is integrated or cap on type-Integrated	
	4.12	Emergency stop button provided	
21.00	<b>CHECK LIST</b>		
	01	Whether quoted as OEM of Engine and whether documentary evidence submitted?	YES/NO
	02	Whether quoted as OEM of Alternator & whether documentary evidence submitted?	YES/NO
	03	Whether quoted as Authorized Dealer of OEM (Engine/Alternator) and whether documentary evidences submitted?	YES/NO

	04	Whether quoted as Assembler , OEM of Gen Set manufacturer or authorized dealer of OEM ( Gen Set Manufacturer)	YES/NO
	05	Whether valid Type Approval, Conformity of Production Certificate from Certification Agencies as per latest CPCB notification for Engine Emission and DG Set Noise Limit submitted?	YES/NO
	06	Whether Copy of Purchase Order and Completion/ Commissioning / Performance Certificate in support of experience have been submitted? YES/NO	YES/NO
	07	Whether separately highlighted any deviation from the technical specification?	YES/NO
	07	Whether detail specification of Alternator with manufacturer's technical literature/catalogue enclosed?	YES/NO
	08	Whether test certificate of Alternator and Control Panel will be submitted?	YES/NO
	09	Whether two sets of installation/ commission, Maintenance Manual shall be submitted?	YES/NO
	10	Whether spare parts for 10 years shall be available?	YES/NO
	11	Whether power and Wiring diagram of Alternator Control Panel submitted?	YES/NO
	12	Whether bill of Materials of Control Panel submitted?	YES/NO
	13	Whether confirmed that control panel drawing shall be approved by OIL before manufacturing in the event of placement of order?	YES/NO
	14	Whether offered engine is as per NIT ?	YES/NO
	15	Whether quoted for supply, installation, commissioning & handing over of genset?	YES/NO
	16	Whether each and every clause is responded or not.	YES/NO
		NOTE: Bidders should note that if clause wise response is not made, then its offer may not be evaluated at all and the offer will be liable for rejection	