



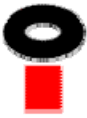
Annexure-I

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

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

E-Tender No.	B.C Date	Material Description & Quantity
SDI3344P15 Dt: 23.04.2014 (SINGLE STAGE COMPOSITE BID SYSTEM)	26.06.2014	LED OUTDOOR DISPLAY BOARD - 02 NOS
SDI3359P15 Dt: 25.04.2014 (SINGLE STAGE TWO BID SYSTEM)	26.06.2014	30 KVA GENERATING SET – 04 NOS
SDI3367P15 Dt: 26.04.2014 (SINGLE STAGE TWO BID SYSTEM)	26.06.2014	TRUCK MOUNTED 250KVA DIESEL ENGINE DRIVEN GENERATING SET – 01 NO.

Application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 (Excepting PSUs and SSI units registered with NSIC) in favour of M/s Oil India Limited and payable at Duliajan is to be sent to Head-Materials, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted one week prior to Bid Closing date. The envelope containing the application for participation should clearly indicate “REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO ...” for easy identification and timely issue of user ID and password. On receipt of requisite tender fee, USER_ID and initial PASSWORD will be communicated to the bidder (through e-mail) and will be allowed to participate in the tender through OIL’s e- Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using “Guest Login” provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL’s web site www.oil-india.com.



OIL INDIA LIMITED
(A Government of India Enterprises)
PO : Duliajan – 786602
Assam (India)

TELEPHONE NO. (91-374) 2808719

FAX NO: (91-374) 2800533

Email: tuhin_roy@oilindia.in ; erp_mm@oilindia.in

FORWARDING LETTER

Tender No. : SDI3359P15 Dt: 25.04.2014

Tender Fee : Rs 1,000.00

Bid Security Amount : Rs 74,500.00

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Bid Closing on : As mentioned in the e-portal

Bid Opening on : -do-

Performance Security : Applicable

Integrity Pact : Applicable

OIL invites Bids for **Supply of 04 Nos 30 KVA 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/LOCAL/E-01/2005 for E-Procurement LCB Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents

The general details of tender can be viewed by opening the RFx [Tender] under RFx and Auctions.. The details of items tendered can be **found in the Item Data and details uploaded under Technical RFX.**

The tender will be governed by:

- a) “General Terms & Conditions” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.
- b) Technical specifications and Quantity as per **Annexure – 1A**.
- c) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents.
- d) In the event of receipt of only a single offer against the tender within B.C. date, OIL reserves the right to extend the B.C. date as deemed fit by the Company. During the extended period, the bidders who have already submitted the bids on or before the original B.C. date, shall not be permitted to revise their quotation.
- e) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons

contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

- f) Bidder are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFX -> External Area -> Tender Documents. The above filled up document to be uploaded in the **Technical RFX Response**.

Special Note:

1.0 General Qualification Criteria:

In addition to the general BRC/BEC, following criteria on Bidders' Experience and their financial capabilities shall be considered (**documentary evidence to be provided along with the bid in Technical RFX -> External Area -> Tender Documents**) as on the Bid Closing Date:

- a) Annual financial turnover of the firm in any of the last 3 financial years or current financial year should not be less than **Rs 74.25 Lakhs**.

2.0 Application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in favour of M/s Oil India Limited and payable at Duliajan is to be sent to Head-Materials, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted only upto one week prior to the bid closing date (or as amended in e-portal). The envelope containing the application for participation should clearly indicate "REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO ..." for easy identification and timely issue of user ID and password. On receipt of requisite tender fee, **USER_ID** and initial **PASSWORD** will be communicated to the bidder (through e-mail) and will be allowed to participate in the tender through OIL's e-Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL's web site www.oil-india.com.

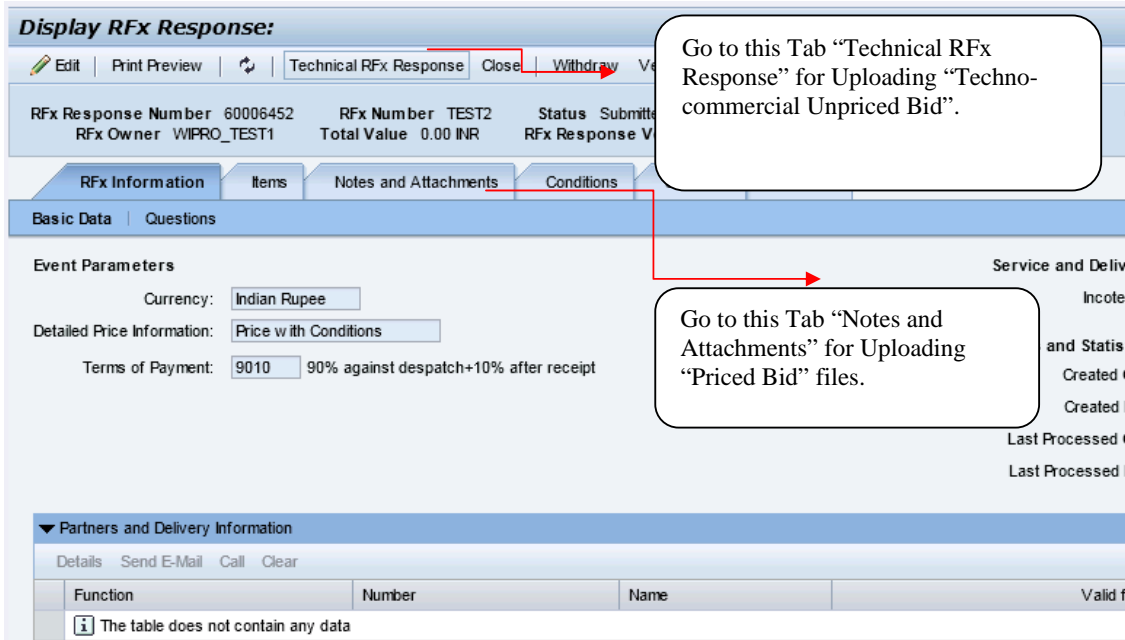
NOTE: PSUs and SSI units are provided tender documents Free of Cost (as per govt guidelines), however they have to apply to OIL's designated office to issue the tender documents before the last date of sale of tender document mentioned in the tender.

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

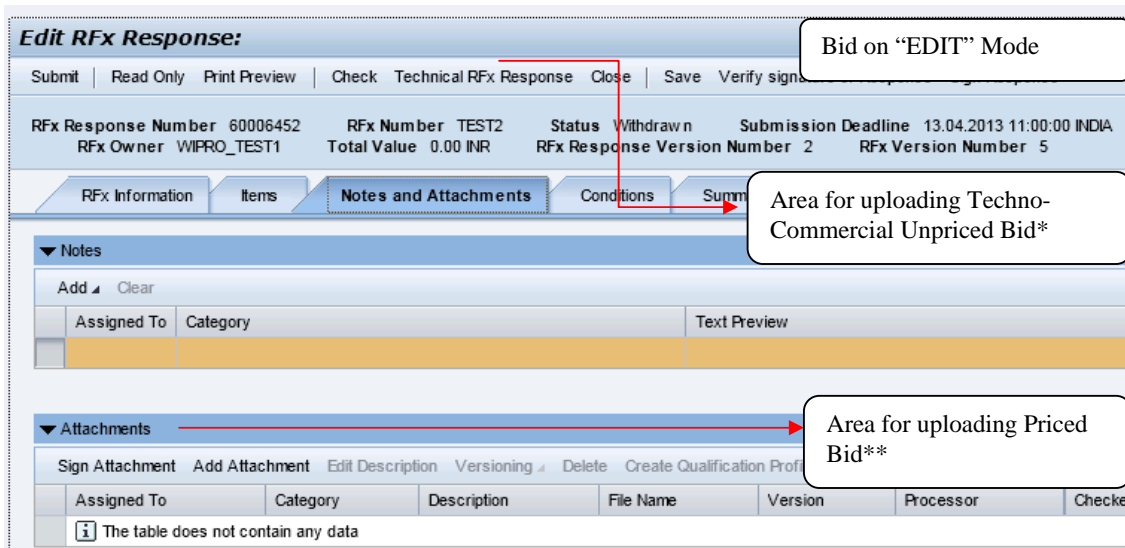
3.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFX Response-> User -> Technical Bid only. The "TECHNO-COMMERCIAL UNPRICED BID" shall contain all techno-commercial details except the prices. Please note that no price details should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

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

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



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



Note :

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

** The “Price bid” must contain the price schedule and the bidder’s commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Attachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.

4.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with **Tender no.** and **Due date** to **Head Materials, Materials Department, Oil India Limited, Duliajan - 786602, Assam** on or before the Bid Closing Date and Time mentioned in the Tender.

- a) **Original Bid Security**
- b) **Detailed Catalogue (if any)**
- c) **Any other document required to be submitted in original as per tender requirement**

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

5.0 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.

6.0 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.

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

9.0 **a) The Integrity Pact is applicable against this tender.** OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide **Annexure-DDD** of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid.

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

- i) **SHRI N. GOPLASWAMI, I.A.S. (Retd.),**
Former Chief Election Commissioner of India
E-mail Id : gopaldaswamin@gmail.com
- ii) **SHRI RAMESH CHANDRA AGARWAL, IPS (Retd.)**
Former Director General of Police
E-mail Id : rcagarwal@rediffmail.com

10.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. **However, if any of the Clauses of the Bid Rejection Criteria /**

Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or “General Terms & Conditions” as per Booklet No. MM/LOCAL/E-01/2005 for E-procurement (LCB Tenders) elsewhere, those in the BEC / BRC shall prevail.

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

NOTE:

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

Yours Faithfully

**Sd-
(R BARMAN)
SR. MANAGER MATERIALS (ID)
FOR : HEAD-MATERIALS**

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the “Bid Rejection Criteria” as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
<p><u>1.0 BID REJECTION CRITERIA (BRC):</u></p> <p><u>(A) TECHNICAL:</u></p> <p>The bids must conform to the specifications, terms and conditions given in the NIT. Bid shall be rejected in case the items offered do not conform to the parameters stipulated in the technical specifications and to the national / international standards. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the bidders without which the same will be considered as non-responsive and rejected.</p> <p>i. The offered engine should be naturally aspirated, water cooled, vertical in-line, four stroke, diesel engine having in line fuel pump, governing class-A1 capable of developing minimum 37 BHP to drive the alternator when running at 1500 rpm at site conditions.</p> <p>ii. The common acoustic enclosure for twin generating set must be designed and manufactured in compliance with the Central Pollution Control Board (CPCB) norms.</p> <p>iii) The bidder must have the credential of supplying minimum 22.2 lakhs worth of single order to any reputed Govt. Organization, PSU, Central Govt. or Public Limited Company for 30KVA or higher capacity Genset as per NIT. Bidder must submit invoice/completion certificate as documentary evidence along with the offer.</p> <p><u>(B) Commercial :</u></p> <p>i). Bids are invited under “Single Stage Two Bid System”. Bidders have to submit both the “Unpriced Bids” and “Priced Bids through electronic form in the OIL’s e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide</p>	

MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. Any offer not complying with the above shall be rejected straightway.

ii). BID SECURITY:

The bid must be accompanied by Bid Security of **Rs 74,500.00** in OIL's prescribed format as Bank Guarantee or a Bank Draft/Cashier cheque in favour of OIL. The Bid Security shall be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. If bid security in ORIGINAL of above mentioned amount is not received within bid closing date and time , the bid submitted through electronic form will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 8.8 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. **The Bank Guarantee towards Bid Security shall be valid for 10 months from Bid closing date. (i.e upto 26.04.2015).**

iii).PERFORMANCE BANK GUARANTEE:

Successful bidder will be required to furnish a Performance Security @10% of the order value. The Performance Security must be valid for 12 months from the date of commissioning or 18 months from the date of despatch whichever concludes earlier. Bidder must confirm the same in their bid. Offers not complying with this clause will be rejected.

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

For exemption for submission of Performance Security, please refer Clause No. 9.12 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders.

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

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

vi).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.

vii).Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

viii).All the Bids must be Digitally Signed using “Class 3” digital certificate (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than “Class 3”

digital certificate, will be rejected.

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

x).INTEGRITY PACT:

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure V of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL’s competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Any bid not accompanied by Integrity Pact Proforma duly signed (digitally) by the bidder shall be rejected straightway. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder’s authorized signatory who sign the Bid.

2.0 BID EVALUATION CRITERIA (BEC):

The bids conforming to the technical specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below:

(A) TECHNICAL :

(1) The manufactured product should be strictly as per OIL’s tender specification.

(B) COMMERCIAL :

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

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

NOTE:

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

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI3359P15 DT: 25.04.2014

<u>SL No.</u>	<u>Item Description</u>	Complied /Not Complied. (Remarks if any)
10	<p><u>TWIN GENERATING SET – Qty 03 Nos</u></p> <p>Twin Generating set having water cooled diesel engine coupled with alternator & capable of developing 24 KW / 30 kVA at 3 phase, 0.8 power factor, 415 volt, 50 Hz at 1500 rpm under NTP conditions as per IS: 10000 or BS: 3514 or ISO: 3046 or latest. The twin D.G set should be mounted on an oil field type rugged skid with common acoustic enclosure.</p> <p>Bidder must provide the detail electrical / electronic engine safety control system circuit diagrams, drawing of oil field type skid, details of acoustic enclosure and schematic diagram of D.G along with the offer.</p> <p>A. <u>DIESEL ENGINE:</u></p> <p>1.0 Naturally aspirated, water cooled, vertical in-line, four stroke, diesel engine capable of developing minimum 37 BHP at 1500 rpm to drive the alternator having in line fuel pump, governing class-A1 etc under the conditions of approx 35°C atmospheric temperature, altitude not exceeding 150 meter above MSL, maximum relative humidity 95% at 35°C.</p> <p>The engine should be suitable for continuous duty & capable of developing 10% in excess of its rated output at its rated speed for a period of 1 hour in any period of 12 hours continuous running without undue heating or any other mechanical trouble.</p> <p>The engine should be anti-clockwise while looking from the flywheel end and should conform to IS: 10000 or BS: 3514 or ISO: 3046 or latest.</p> <p>1.1 The engine should comprise of the following standard accessories:</p> <p>a. Flywheel and flywheel housing.</p> <p>b. Fuel, lube oil & air filter.</p> <p>c. Instrument panel board should have the following gauges</p> <ol style="list-style-type: none"> i. Fuel & lube oil pressure gauge. ii. Water & lube oil temperature gauge. iii. Amp meter & tachometer. <p>d. Engine safety controls (High water temp, low lube oil pressure and over speed).</p> <p>e. 12 volt electric starting system (preferably LUCAS TVS make) comprising of starter, charging alternator and starting ring gear fitted with the flywheel.</p> <p>f. Maintenance Free battery of 180-200amps capacity for each engine.</p> <p>g. Radiator with water pump.</p> <p>h. Safety guard for coupling and other moving components.</p> <p>i. 1no Fuel tank (common for both engines) of capacity max 100litre to run the genset for continuous 12 hours. Each set must have provision of external HSD filling port with theft proof arrangement.</p>	

- j. Exhaust silencer with spark arrestor (muffler) to be provided inside the canopy but in a separate chamber.
 - k. Guard for all moving parts of the engine such as W/pump belt, charging alternator belt etc.
- Any item / point not included in the above specification but necessary for operation shall be stated by the bidder.

1.2 Special Notes (Engine):

a. Bidder should provide documentary evidence in connection with the Emission Limits of Genset. The engine model offered must have valid "Certificate of Type Approval" and "Certificate of Conformity of Production" for the engine model being manufactured after the effective date as per the emission limit notified in the Environment (Protection) Amendment Rules 2002 vide GSR 371(E), dated 17th May, 2002 at Sl. No. 95 and as amended vide GSR 520(E), dated 1st July, 2003, GSR 448 (E) dated 12th July, 2004, GSR 520(E) dated 12th August 2004 and GSR 280(E) dated 11th April, 2008 under Environment (Protection) Act, 1986.

b. All the gauges of engine and alternator (output current, voltage, frequency, water / coolant temp, lube oil pressure, rpm etc) should be mounted on a multifunction panel & visible from outside through a glass window.

c. Bidder has to justify the selection of particular engine along with the H.P.

d. Bidder should provide heat load & fuel consumption curve along with the offer.

1.3 Maintenance Tools:

a. 04 (four) sets of standard tool kit should be supplied in heavy duty 3/5 tray metal box with handles & locking arrangement for carrying out normal maintenance of engine as per Annexure-II (in the attached list).

b. Bidder should quote unit quantity [set/no] of each item of the tools as per Annexure-II. The cost of tools will be considered for bid evaluation. However OIL reserves the right to decide the item & quantity of tools for procurement along with the main equipment.

B. ELECTRICAL:

The electrical scope of supply shall comprise of the following:

1.0 Major equipment:

- a. Alternator, 30 kVA rated - 2 nos
- b. NGR (with NGR Monitor) - 1 or 2 nos (depending on NGR system design).
- c. Control Panels - 2 nos (One for each alternator)
- d. Change-Over Switch Panel - 1 no.
- e. Isolation Transformer (30 kVA rated, 415V/415V ratio) - 1 no.
- f. Earthing Materials - 1 Set

1.1 Miscellaneous Equipment:

Cables of various sizes, lugs, GI straps, Industrial type Plug-sockets etc., and any other material required to build, install and commission the system.

1.2 Drawings:

- a. Schematic drawings (hard copy) - 4 set.
- b. Schematic drawings (soft copy) - 1 set.

Above items should be designed to be mounted on one common skid.

C. ALTERNATOR:

1.0 Brushless type alternator of 30 kVA rating, capable of developing 30 kVA at 3 phase, 415 Volt, 0.8 P.F, when coupled with a water cooled engine & running at 1500 rpm under NTP conditions.

The brushless alternator shall be composed of 3 phase AC exciter with rotating diodes, surge suppressor, static voltage regulator with voltage adjuster potentiometer, main field windings and stator windings. PIV of exciter diodes must be minimum 6 times the maximum exciter armature operating voltage or 1200 V whichever is higher. All windings should be made from electrolytic grade copper of high purity.

1.1 The alternator shall be of the following makes:

STAMFORD, Kirloskar, NGEF, Crompton Greaves, AVK-SEGC

1.2 Detailed Specifications of the Alternator:

- a. Rated Output: 30 KVA continuous rating at 0.8 PF at specified ambient.
- b. Rated Voltage: 415 Volts [permissible variation +/-2 % at rated speed, load & PF].
- c. Phase: 3ph, 4 wire, neutral point has to be brought out to generator terminal box but not connected to any power circuit. The Neutral conductor shall be grounded through a Neutral Grounding Resistor (NGR) - refer part "B" below.
- d. Type: Brushless.
- e. Frequency rated/cycle: 50 Hz [permissible variation +/-2 % at rated load & PF].
- f. Rated power factor: 0.8 lagging.
- g. No. of Poles: 4 (four).
- h. Class of insulation: Class F/H.
- i. RPM: 1500
- j. Phase sequence: UVW
- k. Conforming to: IS: 4722, 13364 with latest amendment.
- l. Rating: Continuous suitable for Motor loads.
- m. Connection: Y (Star)
- n. Alternator Enclosure & Terminal Box Protection: IP23 (minimum)
- o. Amplitude of vibration: Should be as per IS-12075.

- p. Excitation system: Brushless, self excited and self regulated with solid state AVR. The AVR should be mounted in separate control panel, and not on body of alternator.
- q. Motor starting ability: 200 % of FLC for 10 sec with max. voltage dip of 20%.
- r. Unbalanced current carrying capacity: 25% of FLC continuously, with none of the phase currents exceeding the rated current.
- s. Short circuit current withstand capacity: Shall not exceed 15 times the peak value or 21 times the RMS value of the rated current in the case of short circuit on all phases during operation at rated voltage.
- t. Voltage swing (Transient response): Maximum 10 % with 0.2 to 0.7 sec (recovery time), when rated load is suddenly switched on.
- u. Automatic voltage regulation: ± 0.5 % to ± 1.0 % from no load to full load.
- v. Mounting: Foot Mounted

Note - Neutral Conductor is not to be used - There will be no single phase load supplied directly from the alternator. All single phase loads, and loads requiring neutral will be supplied from the isolation transformer).

1.3 Special Notes (Alternator):

- a. No. of alternator bearings should be clearly mentioned in the offer.
- b. The alternator should be capable of sustaining a 10 % over load for one hour in any 12 hours operation.
- c. The alternator shall be designed to withstand a speed of 1.2 times the rated speed.
- d. The alternator should be capable of continuous operation over a range of 110 % of rated voltage.
- e. Bidder shall mention efficiency of the alternator at 25 %, 50 % & 80 % load at 0.8 P.F in their offer.
- f. Bidder should confirm that total harmonic distortion factor should be less than 3% between phases at no load.
- g. Bidder to confirm the frame size of the offered alternator.

1.4 Technical Details:

- a. Alternator stator winding terminals are to be connected to 4 nos. of suitably rated terminals supported on sheet molding compound (SMC) supports inside the alternator terminal box.
- b. The alternator terminal box should be suitable & should have sufficient space for terminating 1no. 4 core x 10 sq. mm, 1100V grade PVC insulated, multi-strand copper cable. Separate cable box shall be provided for supporting power cable. Suitable size of cable gland should be fitted in the terminal box. Cable gland and entry hole shall also be provided in the TB for AVR cables

mounted on the control panel.

c. Neutral point of each alternator shall be connected to the NGR (see NGR Specs below), and thereafter to 2 (two) nos. heavy duty PVC insulated, PVC sheathed, flexible, single core, IS approved copper cables of 25 sq mm size and of sufficient length (minimum 5.0 m) for earth connection (to separate earth electrodes near the skid). The free ends of cables are to be terminated with heavy duty, tinned copper tubular lugs. Earth cable shall be protected to avoid any damage and to be run in galvanized, flexible MS conduit. Entry holes shall be provided in the alternator TB for entry of earthing cables. Cable make: Finolex / Havells.

d. 2 nos. of earth studs are to be provided on both sides of the alternator for body earthing.

e. Lifting hooks are to be provided for lifting the alternator.

f. Automatic voltage regulator should be mounted in the control panel with approved rubber bushes under AVR mounting holes to reduce vibration. AVR should have under speed & over excitation protection features with LED display.

g. Alternator windings and AVR should be suitable for humid atmosphere as per ambient conditions mentioned above in the technical specifications. AVR should be suitable for motor load duty.

h. Alternator frame should be made from MS or Cast steel. Alternator bodies of light construction material may not be accepted.

1.5 Technical Specification of Neutral Grounding Resistance (NGR):

The NGR system shall comprise of one Neutral Grounding Resistance. The NGR shall be able to restrict earth fault currents to 750 milli-Amp, as per Regulation 100 of CEA Regulations (Measures relating to Safety and Electric Supply), 2010. The details of NGR are as follows:

a. Mounting: The NGR shall be mounted on a separate cabinet, on the generator skid.

b. Connection: One end of the NGR is to be connected to the neutral conductor of the Alternator / Bus. The other end should have provision to connect with earth via cable. The earthing shall be done by insulated, single core copper cable, of size not less than 4 mm².

c. Type of NGR: Wire-wound resistor, 1000 Ohms, in parallel to achieve the required NGR value.

d. NGR Monitor: The NGR shall have a monitoring system, which shall alert the operator under the following conditions:

- i. If there is an earth fault, and any of the phases are grounded.
- ii. If there is a breakage of the neutral path.
- iii. If the NGR are open-circuited or short-circuited.

The NGR system may be connected either at the generator neutral points

individually, or at one common point (the neutral bus in the change-over panel). The design of the system should be such, that the system neutral is at all times, grounded through the NGR, regardless of which alternator is providing power. This should be automatic, without any manual intervention. The design shall be approved by OIL before manufacture.

Appropriate Instrument transformers (CT/PT) shall be used wherever necessary by design.

Bidder shall have to provide details of proposed NGR system, in a schematic diagram with his bid.

D. CONTROL PANEL:

Individual control panel for each alternator and change over switch shall be placed inside the acoustic enclosure.

1.0 Construction details:

a. 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, 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. Suitable wire mesh should be provided on the inner side of the louvers to prevent entry of insects.

b. Panel should be supported on frame of 3.15mm thick sheet metal so that bottom cable entry plate of panel is at suitable height (min. 300mm) from floor of the unit for easy and safe entry of power and control cables. The frame should be able to withstand the stress and vibration during transportation.

c. Panels should be thoroughly cleaned before painting. Metal surfaces should be given seven-tank anti corrosion treatment before applying 2 coats of antirust paint followed by 3 coats of light grey paint [shade no. 631 of IS: 5] of 50 μ thick.

d. Salient Points:

i. Panel shall be minimum IP 23 protected. Panel shall have provision for earthing at two separate points.

ii. AVR of the alternator shall be mounted inside the control panel with vibration proof supports.

1.1 Accessories of the Panel:

a. Main Components: (Mounted Inside the Panel)

i. The control panel shall have one set of TP & N electrolytic grade, high conductivity, tinned copper bus-bars, made from electrolytic

grade copper of 99.0 % purity, rated 100 Amps and supported at required intervals to withstand short circuit fault levels up to 10 kA for 3 seconds. Bus-bar support shall be non-hygroscopic SMC / FRP and the bus-bar shall be insulated with heat shrinkable PVC sleeves. Incoming and outgoing power cable shall terminate on tinned copper links rated for 100 Amps.

ii. 1 No. 125 Amps TP & N (Neutral bus to have removable link with bolt) SDF unit as incomer, fitted with 63 Amps HRC fuse. The SDF unit will be suitable for operation from outside the panel door similar to type SP (make: GE).

iii. 1 No. 100 Amps, 4 pole MCCB, 25 kA breaking capacity, with inbuilt electronic type adjustable overload & short circuit protection as outgoing breaker. 240 VAC shunt trip coil is required for external tripping. MCCB shall be suitable for operation from outside with door interlocking facility to ensure that the door can be opened only when the MCCB is in the OFF position. Overload should be adjustable from 50% to 100% and short circuit setting should be also adjustable from 1.5% to 5%. MCCB shall trip on both OL & SC faults and earth leakage faults. (Make: Legrand / Schneider / Equivalent).

iv. 1 No. residual current device (RCBO, with OL & SC protection) or CBCT along with earth leakage relay for protection against earth leakage should be provided. Relay adjustable settings: 0.1-0.3-1.0-3.0-10.0 Amps instantaneous or adjustable 0.06-0.1-0.3-1.0- 5.0 seconds in steps. In case of earth leakage fault the relay should trip the MCCB through shunt trip coil. The CBCT (ID 80 mm) size should be such that relay do not trip during short circuit due to saturation. Similar to Cat No (26093+ 26091) of Legrand (make: Legrand / Schneider).

v. The NGR and NGR Monitor may be mounted inside the COS Panel, as per design adopted. However, all design has to be approved by OIL before manufacture.

vi. 1 no. KWH meter integrating, electronic type suitable for balanced and unbalanced loads, C.T. operated, 3 ph, 4 wires (make: Alstom /L&T).

vii. 3 nos. Bar Primary Resin cast CT of 65/5 ratio, 15 VA , class-1 conforming to IS 2705 (3 nos. for ammeter and KW meter) (make: AEL / Kappa).

viii. Auxiliary Relay / Contactor 240 AC with some spare contacts. Quantity should be as per the control circuit requirement (make: L&T /Siemens/ Schneider).

ix. HRC instrument fuse holders NS type phenol moulded with suitable fuses & links for different circuits. Separate fuses and neutral links should be provided for control circuit indicating system lamps, instruments, tripping circuits and acoustic enclosure / hut illumination fittings and power outlets (make: GE).

x. Terminal strips for terminating the AVR cable from Alternator.

b. Instruments and Switches: (Mounted on front hinged door)

i. 1 No. M.I. Voltmeter, 1.0% accuracy, 96 sq. mm , 0 to 600 VAC (make: AEL / Rishabh).

ii. 1 No. Voltmeter selector switch, RY-YB-BR-Off (make: Kaycee / L&T).

iii. 1 No. M.I. Ammeter, 1.0% accuracy, 96 sq. mm, 0-65/200 AAC, C.T. operated (make: AEL / Rishabh).

iv. 1 No. Ammeter selector switch, R-Y-B-Off (make: Kaycee/ L&T).

v. 1 No. Digital frequency meter, 96 x 96 mm, scaled 0-100 Hz, suitable for 240V AC operation (make: AEL/ Rishabh Instruments).

vi. 1 No. P.F, Range: 0.5lag - 1.0 -0.5 lead (make: AEL/Rishabh).

vii. 1 No. M. I. KW meter, Dynamometer type, 3 ph, 3 element, 96 sq. mm, 1.0% accuracy, 0-50 KW (make: AEL / Rishabh).

viii. 1 No. Hour meter to indicate engine run hours (make: AEL / Rishabh).

ix. Control panel should have following indication lamps mounted on panel front door:

Trip on earth fault.

Set running.

R-Y-B Phase indication.

All lamps shall be of LED type with LVG protection, 240 V AC, having long life and low energy consumption (make: Binay).

c. Wiring Scheme:

All cables and wires interconnecting alternator to control panel, NGR panel and changeover switch etc. are to be supplied by the bidder.

i. Control system will work on 415 VAC (without neutral).

Control panel wiring shall be done with 2.5 sq mm, flexible multi-stranded copper, 1100 V grade PVC insulated wires approved by ISI, Tariff Advisory Committee and Fire Insurance Authority. All wiring will have copper lugs & 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 & have ring type lugs. Wires shall be colour coded, with numbered ferrules. Make: Finolex/ Havells.

ii. Output from the alternator terminal box shall be connected to control panel input (SDF unit) with heavy duty 4 x 10 sq. mm, 1100 V grade, PVC insulated and PVC sheathed, armoured, stranded copper cable approved by IS:1554. Cable is to be connected using copper lugs (make: NICCO, CCI, Finolex, Havells).

iii. AVR shall also be wired from alternator terminal box to

control panel using heavy duty PVC insulated and PVC sheathed, 1100 V grade armoured, stranded, ISI approved copper cable of suitable size. Cable is to be connected using copper lugs (make: NICCO, CCI, Finolex, Havells).

iv. Heavy duty single compression cable glands shall be provided at all cable entries for power and control cables. Cable glands shall also be provided for the outgoing power cable. All cable glands to be supplied by the party (make: Baliga / GMI / Dowells).

v. All power and control cable terminal ends will have suitable heavy duty crimping lugs (make: Dowells).

vi. All cables having exposed runs inside the skid shall be provided with mechanical protection in their run to prevent physical damage to the cables.

vii. Suitable provision shall be made for safe routing of output cable from control panel to outside of the unit.

E. CHANGEOVER SWITCH PANEL:

The control panel outputs shall be connected to a changeover switch panel, which will be placed in an easily approachable position in the skid, inside the acoustic enclosure. The panel shall be made of 2 mm thick MS CRCA sheet steel, wall mountable or self-supporting, dust and vermin proof, having front hinged door. Detachable gland plate is to be provided for incoming and outgoing cables. Suitable size of cable gland are to be provided at cable entry point of the COS panel.

Panel shall be IP23 protected. Panel shall have provision for earthing at two points.

1.0 Accessories of COS Panel:

a. 1no. 4 pole 100 Amps changeover switch suitable for front operation, with handle on panel door. The incoming terminals of the COS shall be connected to the load terminals of the outgoing MCCB units of the alternator control panels.

The position of the connected (incoming) sides and off position shall be clearly visible from outside the panel door and also marked on the door. Live parts of the COS shall be protected with terminal shrouds (make: GE / Havells / Crompton Greaves).

b. One no. 63 Amps 5 pin socket (3P+1N+1E), mounted in a sheet steel enclosure. The outgoing / load terminals of COS (as described above) shall be connected to the socket. From the socket, power shall be fed to the outside load circuits. Socket shall be suitably earthed at two points (make: BCH).

The MCCB to COS and COS to the 5 pin socket connection shall be done with heavy duty 4 x 10 sq. mm, 1100 V grade, PVC insulated and PVC sheathed, armoured, stranded copper cable approved by IS:1554, using copper lugs (make: NICCO, CCI, Finolex, Havells).

c. The NGR shall be mounted on the Change-Over Panel or the Generator Control Panel, depending on the design adopted. All such designs shall be approved by OIL before manufacture.

F. ISOLATION TRANSFORMER:

1(one) no Isolation transformer should be provided to convert the 3phase 3wire to a 3phase 4wire system. This is to provide power to loads requiring a neutral (e.g., bunk houses, consumer utilities etc.)

Isolation Transformer should have the following features:

- # Insulation - Dry Type.
- # Enclosure - minimum IP 23 rated.
- # Rating - 30 kVA, 3 Phase, 50 Hz.
- # Ratio - 415V/415V.
- # Winding - Delta primary, Star Secondary, 3phase.
- # Mounting - On skid.
- # Terminals - Connection terminals suitable for connecting 10 or

16 sq. mm copper cable.

The Transformer has to be adequately protected on both primary side by appropriately rated HRC fuses and secondary sides by appropriately rated MCCB.

G. EARTHING:

1.0 The earthing scheme for the unit should be as per IS: 3043.

1.1 Two nos. 25 x 5mm GI straps shall be suitably fixed in each alternator unit near the floor. Strap galvanization thickness should be min. 85 micron and as per IS. Alternator and Control panel body earth terminals, changeover switch panel earth terminals, enclosure base shall each be connected with two nos. separate cables to both the straps with independent connections at separate points.

1.2 Heavy duty PVC insulated, PVC sheathed, flexible, single core, IS approved aluminum cable of 25 sq mm size shall be used for each equipment earth connection. The cables are to be terminated with lugs and suitably protected against mechanical damage. Cable make: Finolex/ Havells.

1.3 Both the straps (total 4 straps for both the sets) shall extend up to the back side of the enclosure. Each strap will have one no. of zinc coated terminal stud of 10mm dia provided at end of the straps for connection to earth electrodes. Two nos. of earthing cables of size & type mentioned in point no. 3 above and individual length of 5.0 mtr shall be provided and connected to these two straps for external earthing. The free ends of these cables shall be crimped with heavy duty, aluminum tubular lugs. Suitable openings shall be provided in the side of the enclosures to facilitate the entry of outgoing power cable and earth leads.

H. Special Notes (Electrical Items):

1.0 Offered alternator should be of proven design / model. The model shall

be in regular production range.

1.1 Alternators, control panels and other electrical items must be new and in unused condition. No reconstructed/ rebuilt item will be acceptable.

1.2 Bidder shall submit the following information along with the offer failing which offer is liable for rejection:

- a. Frame size of the offered alternator.
- b. Detailed dimensional/GA drawings of the offered alternators control panel and COS panel.
- c. Electrical Schematic and Indicative power and control wiring diagram.
- d. Detailed information and schematic diagram about the NGR system employed.
- e. Detailed information about the Isolation transformer.
- f. Component layout diagram.
- g. Bill of Materials, catalogue and datasheets of all the components used.

1.3 In case of the successful bidder, OIL shall study the submitted drawings and incorporate modifications/ corrections if required, which shall be conveyed to the bidder. The bidder shall incorporate the modifications/ corrections in the revised drawings and submit the same to OIL for approval. Only after getting due approval of final revised drawings from OIL, the bidder/ manufacturer shall proceed for manufacturing/assembly of the panels.

1.4 Bidder should confirm in their offer that after successful commissioning of the equipment 4(four) sets of "AS BUILT" electrical drawings of the panels and all electrical power and control wiring diagram inside the skid will be provided in hard copy as well as in soft copy.
Also Electrical drawings shall be fixed on the panel door for each panel.

I. GEN-SET INSTRUMENTATION:

Bidder must comply to the following points in connection with the instrumentation / electronic parts / system / components fitted with the engine / alternator / panel etc.:

- a. Details of Electronics & Engine Safety Control system along with the offer.
- b. To provide details of manuals, terminal drawings etc. for engine safety control system along with the supply.
- c. To provide 2years spares of all Electronic cards and sensors.
- d. In case of 3rd party product, address of OEM / authorized dealers should be provided for procurement of spares in future.
- e. To provide trouble shooting manual / guide for fault rectification in instrument panel along with the supply.

J. SKID & ACOUSTIC ENCLOSURE:

1.0 Each engine & alternator set should be in coupled condition and mounted on common base frame skid fitted with special vibration isolators for making the DG set vibration free.

The common base frame skid for both the D.G sets should be mounted on a 3runner Oil Field type skid fabricated out of ISMB200 reinforced with suitable

cross members.

Both ends of the skid should have 600mm extended portion beyond the acoustic enclosure and it should be covered by 10mm chequered plate.

The ends of the skid should be projected out by 300mm and curved upwards. 150 NB X 80 SCH pipe with provision for lifting should reinforce the end of skid for tail boarding.

1.1 The Twin Genset (Engine, alternator, control panel, changeover switch, fuel tank and other auxiliaries) should be placed in a common acoustic enclosure. The arrangement should be made such that the operators & maintenance crew can enter and move inside the hut for normal inspection of the generating set. Provision should also be there to take the generating set outside in case of failure.

The hut should be complete with internal wiring and light fitting for illumination. There should be 2 (two) nos. screw type 15 watt CFL fitting with bulb. Heavy duty PVC insulated and PVC sheathed armoured, stranded copper cable shall be used for wiring.

Suitable MCB should be used in the internal wiring.

Overall limiting dimensions of the skid should be L: 6 m X W: 2.5 m X H: 2.25 m.

1.2 Both the generating sets should be placed in common acoustic enclosure. The acoustic enclosure should be modular type. This should be easy assembling /dismantling & not fixed type. It should have following features

- a. locking arrangement
- b. Lifting arrangement
- c. Draining arrangement for fuel and lube oil.
- d. Air breather.
- e. Hood for rain protection
- f. Emergency stop button
- g. Panel meter viewing window
- h. Powder coated walls
- i. Door Hinge must be made out of 6mm MS plate in place of C.I / C.A hinge.
- j. Suitable Fire extinguisher to be provided inside the canopy.

1.3 The bidder must produce valid Certificate from Central Pollution Control Board for acoustic enclosure as per the Environment Protection (2nd Amendment) Rules, 2002, vide notification no G.S.R. 371(E), dated 17th May, 2002, at serial no. 94 (paragraph 1 & 3) during inspection of the generating set.

The maximum permissible sound pressure level for the DG sets with rated capacity shall be max 75dBA at 1 metre from the enclosure surface.

The complete arrangement drawing of the gensets, inside enclosure with acoustic enclosure should be forwarded to OIL for approval once order is placed.

Bidders should provide detail drawing of above mentioned skid & enclosure for technical scrutiny.

K. OPERATING CONDITIONS AT SITE:

The engine / alternator should be suitable for operation at the following site conditions:

- a. Engine room temperature (max.) : 45°C
- b. Engine room temperature (min.) : 05°C
- c. Max. relative humidity at 21°C : 98 %
- d. Max. relative humidity at 35°C : 95 %
- e. Max. relative humidity at 41°C : 70 %
- f. Altitude (max) : 130 metres
- g. Average annual rainfall : 343cms

L. SPARE PARTS:

1.1 Spare Parts list for two years normal operation of the generating set (engine, alternator, control panel, COS panel etc.) in addition to commissioning spare parts shall be provided along with the offer. Item wise price break up should also be provided.

1.2 Bidder should quote unit price for following spare parts. Item wise price of each spare part with part no should also be provided.

Bidder must mention in their offer the total quantity of each of the following spare part require for running of each engine for 2000hrs.

- a. Fuel Filter
- b. Lube Oil Filter
- c. Air Filter
- d. Electric Starter
- e. Charging Alternator
- f. Fuel Injector
- g. Radiator & Alternator Power Transmission Belt Set
- h. Coolant (specify brand name)
- i. Fuel Pump

1.3 The following items shall be offered as Mandatory Spares to be supplied for the alternator unit, along with the main equipments. Bidder should quote unit price for following spare parts.

- a. Automatic voltage regulator unit (along with any other component used with AVR).
- b. Standard (forward) diode for rotating rectifier assembly.
- c. Reverse diode for rotating rectifier assembly.
- d. Varistor / surge protector.

1.4 The unit cost of above spare parts will be considered for bid evaluation. However OIL reserves the right to decide the item & quantity of spare parts for procurement along with the main equipment.

M. PARTS LIST, INSTRUCTION MANUAL & DRAWINGS:

1.1 Supplier shall provide 03 (three) sets of spare parts list, operator instruction manual and workshop maintenance manual covering all the items for both engine and alternator in hard copy as well as soft copy.

1.2 Supplier shall provide 2(two) sets of drawing showing installation details of the generating set on the oilfield type skid.

1.3 02(two) sets of wiring diagram for the control panel and all inter-connecting power and control wiring drawing between the alternator, control panel and changeover switch shall be provided for each generating set.

1.4 Successful bidder will be provided approved drawings of electrical / instrumentation / mechanical along with the P.O. Manufacturer should follow the drawings & assemble the final product accordingly.

N. INSPECTION AND TESTS:

1.1 The inspection of plant and machineries prior / during manufacturing is at OIL's discretion but such inspection shall not relieve the supplier of his responsibility to ensure that the equipment supplied is free from all manufacturing and other defects and conforms to correct specifications. Supplier will be notified in advance, if it is intended to inspect plant & machineries.

1.2 Pre-dispatch inspection of all the sets shall be carried out by OIL's representative at the works of manufacturer. Full load testing of the generator sets for output and performance shall be carried out in presence of OIL's representatives to their satisfaction. Supplier / manufacturer shall intimate OIL at least 3weeks in advance and accordingly arrange for inspection at their site.

1.3 Despatch clearance will not be given unless OIL is fully satisfied as regards manufacturing to order specifications and successful testing.

O. TEST CERTIFICATES:

Detailed records and certificates of the foregoing tests shall be submitted to OIL. The test certificates / records shall be supplied in quadruplicate and those for electrical equipment shall be endorsed suitable for use in the climatic conditions specified. Supplier should also certify that spark plug cables are protected and possibility of spark is completely eliminated.

P. PACKING:

The packing shall be sufficiently robust to withstand rough handling / transit damage. Boxes / packing cases containing electrical equipment shall be water proof lined. Control panels and electrical items in particular should be packed with sufficient care (with shock/ vibration proof lining) to prevent transit damage. Loose components shall be packed separately.

Q. ADDITIONAL ITEMS:

Any item not included in the specifications but necessary for efficient control and operation of the alternator may be included in the offer.

R. SPECIAL NOTES FOR BIDDER:

1.0 The bidder should be an OEM or authorised dealer of OEM for engine, alternator or reputed assembler for Generating sets.

1.1 If the bidder is an OEM or authorised dealer of engine / alternator, he

	<p>must purchase the items other than his own scope of supply from OEM or authorized dealer of those items. In that case bidder must provide the documentary evidence from the OEM or authorised dealer of other items from whom the purchase would be made along with the supply</p> <p>1.2 Bidder should have the experience of supplying and successfully commissioning minimum 10nos of similar individual or twin generating set in last three years. Documentary evidence in this regard must be forwarded along with the offer.</p> <p>1.3 The bidder must confirm in their offer that after sales service in respect of engine, alternator and other equipment / spares will be provided by their respective OEM or authorised dealers who must have servicing facility / dealership in India since the last 5years & provide documentary evidence.</p> <p>1.4 The bidder must provide confirmation letter from OEMs for uninterrupted supply of spares of the equipment minimum for next 10years from the date of delivery of the equipment.</p> <p>1.5 Bidder must supply the maintenance tools as per Annexure-II attached with the tender & submit the same with the offer for technical scrutiny.</p> <p>1.6 Bidder must fill up the Technical Check List- Annexure-III attached with the tender & submit the same with the offer for technical scrutiny.</p>	
<u>20</u>	<p><u>TWIN GENERATING SET – Qty 01 No</u></p> <p>Same as Item No. 10</p>	
<u>30</u>	<p><u>INSTALLATION AND COMMISSIONING – 1AU</u></p>	

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

LIST OF TOOLS**ANNEXURE: II**

Sr. No.	Description of Item	Qty
1.	Open Jaw Double Ended Spanner set in Metric & Inch-13P/C per each set.	01 Set
2.	Double Ended Ring Spanner [deep offset hexagon ring] set in Metric & Inch-13P/C per each set.	01 Set
3.	Heavy duty Double Hexagon Standard Socket compatible for ½” Sq. Drive in Metric & Inch -8mm to 36mm [1/4” to 1 3/8”] -26P/C/system per each set.	01 Set
4.	Reversible [quick release] Ratchet compatible for ½” Sq. Drive- overall length 250mm-01per set.	01 Set
5.	Sliding T-Bar compatible for ½” Sq. Drive-01per set.	01 Set
6.	Extension Bar compatible for ½” Sq. Drive- overall length 75mm-01per set.	01 Set
7.	Extension Bar compatible for ½” Sq. Drive- overall length 125mm-01per set.	01 Set
8.	Extension Bar compatible for ½” Sq. Drive- overall length 250mm-01per set.	01 Set
9.	Universal Joint compatible for ½” Sq. Drive- overall length 78mm-01per set.	01 Set
10.	L- Handle compatible for ½” Sq. Drive- overall length 250mm-01per set.	01 Set
11.	Adapter ¾” F X ½” M- 01per set.	01 Set
12.	Adapter ½” F X ¾” M- 01per set.	01 Set
13.	Universal Socket Wrench ½”drive [1/4”, 3/8”, ½”, 9/16”, 5/8”]- 01per set.	01 Set
14.	Screw Driver Standard Blade, Cushion grip- 8mm X 250mm- 01per set.	01 Set
15.	Screw Driver 9 Tips with handle, Cushion grip- 01per set.	01 Set
16.	Adjustable Spanner- 200mm [8”]- 01per set.	01 Set
17.	Adjustable Spanner- 300mm [8”]- 01per set.	01 Set
18.	Allen Key Set-Long- Metric & Inch- 1.5mm to 12mm [12nos] & 1/16” to ½” [12nos] - 01per set.	01 Set
19.	Combination Pliers- 200mm [8”]- 01per set.	01 Set
20.	Long Nose Plier- 150mm-01per set.	01 Set
21.	Circlip Plier-Straight Tip [internal Circlip puller]-Length 175mm [7”]- 01per set.	01 Set
22.	Circlip Plier-Bent Tip [external Circlip puller]-Length 175mm [7”]- 01per set.	01 Set
23.	Center Punch-Forged tool Steel hardened & tempered – 6mm X 100mm [1/4” X 4”]- 01 per set.	01 Set
24.	Ball Pen Hammer- Head length 355mm [14”]- 16 OZ- 01 per set.	01 Set
25.	Soft Face [Polymer] Hammer- Head Ø25mm- 01 per set.	01 Set
26.	Feeler Gauge- 25 Blades-300mm Long in Metric & Inch- 01 each per set; Make: Freeman.	01 Set
27.	Measuring Tape- 5Mtrs metallic-Auto retractable- 01 per set; Make: Freeman.	01 Set
28.	Tin snips- Drop forged carbon steel, hardened & tempered-Size 300mm [12”]- 01 each per set.	01 Set
29.	Thread Gauge- BSW, Metric, UNC, UNF-01 each per set.	01 Set
30.	Caliper- Inside & Outside- 150mm [6”]- 01 each per set.	01 Set
31.	Screw Extractor Set-Hexagonal Head- 3mm to 18mm [1/8” to ¾”]; - 01 per set.	01 Set
32.	Spirit Level-ABS Plastic-3vials [horizontal, plumb & 45°] - 01 per set.	01 Set
33.	Cold Chisel-Forged Chrome-Vanadium steel, hardened, quenched & tempered- 12mm X 150mm & 25mm X 150mm – 01each per set.	01 Set
34.	Sound Meter	01 No

Note: 1. All the above tools should be Snap-On / Stanley make except otherwise specified.

2. All the above tools must be supplied in a heavy duty 3/5 tray metal box with handles & locking arrangement.

Part I TECHNICAL

The following check list must be completed and returned with the offer. Please ensure that all these points are covered in your offer. These will ensure that your offer is properly evaluated. Please indicate details or Yes / No. as applicable to the following question, in the right hand column.

Sl. No.	PARAMETERS/REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Whether quoted as OEM / Authorized dealer of OEM? Whether documentary evidences submitted?		
2	Whether separately highlighted deviation from the technical specification?		
3	Whether a detailed specification of Engine, Alternator etc. as per NIT specifications with manufacturer's technical literature / catalogue enclosed?		
4	Whether test certificate of the Engine, Alternator, Panel, Acoustic Enclosure etc. will be submitted?		
5	Whether Installation / commissioning of the Genset offered as per NIT specifications?		
6	Whether spare parts for 10 years shall be available?		
7	Whether indicative power & wiring diagram of Alternator, Control Panel, and electronic safety control system submitted?		
8	Whether Engine offered is rated for continuous power & net HP is min 37HP?		
9	Whether the twin Genset will have common acoustic enclosure?		
10	Whether general arrangement drawing of Genset with all the equipment & acoustic enclosure has been provided?		
9	Make & Model of Engine		
10	Make & Model of Alternator		
11	Make & Model of Control Panel		
12	Make & Model of COS		
13	Have you met all BEC / BRC clauses?		

Part II DOCUMENT:

Sl. No.	DESCRIPTIONS	DOCUMENT ENCLOSED Yes or No	REMARKS, IF ANY
1	Whether O & M Manual, Engine built up records, Parts list of engine in soft as well as hard copy provided?		
2	Whether documents of electronics system / circuit diagram of the Engine & Electrical circuit diagram of Alternator, COS, Panel provided?		
3	Whether documents of Performance rating curves of the engine provided?		
4	Whether documents of Specific fuel consumption of the engine provided?		
5	Whether documents of Emission norms of the engine provided?		
6	Whether documents of Heat load calculation of the engine provided?		
7	Whether drawing of dimensional layout diagram of the Genset provided?		

Offer ref:.....dated:

OIL's Tender No:

Signature: _____

Name: _____

Designation: _____

Date: _____

Annexure- DDD

INTEGRITY PACT

Between

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

And

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

Preamble :

The Principal intends to award, under laid down organizational procedures, contract/s for Tender No. **SDI3359P15** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

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

Section 1 - Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
 2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 3. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/Contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

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

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

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

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

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
1. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 - Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.
3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

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

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

2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

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

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

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

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

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

Section 9 - Pact Duration

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

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

Section 10 - Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

<p>_____</p> <p>R BARMAN</p> <p>SR. MANAGER MATERIALS (IP)</p> <p>_____</p> <p>For the Principal</p>	<p>_____</p> <p>For the Bidder/Contractor</p>
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Place. Duliajan.	Witness 1 :
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Date 27.04.2014 .	Witness 2 :
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Bidders Response Sheet**Annexure-FFF**

Tender No.	
Bidders Name	

Sl No.	Description	Remarks
1	Name of Bidder	
2	Whether tender document purchased from OIL's offices.	
3	Place of Despatch	
4	Whether Freight charges have been included in your quoted prices	
5	Whether Insurance charges have been included in your quoted prices	
6	Make of quoted Product	
7	Offered Validity of Bid as per NIT	
8	Delivery Period in weeks from placement of order	
9	Complied to Standard Payment Terms of OIL or not.	
10	Bid Security Submitted (if applicable)	
11	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
	c) Name and Full Address of Issuing Bank:	
12	Confirm that the Bid Security submitted (In case of Bank Guarantee) is in toto as per format provided in the tender.	
13	Bid Security if Not submitted reasons thereof	
14	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
15	Integrity Pact Submitted (if applicable)	
16	Confirm that the Integrity Pact submitted is in toto as per format provided in the tender.	
17	Whether submitted documents in support of General Qualification criteria of NIT	
18	If bidder is Small scale unit whether you have quoted your own product	
19	If bidder is Small scale unit whether you are eligible for purchase preference (as per Govt guideliness)	
20	Whether filled up the bank details for online payment as per Annexure GGG	

NOTE: Please fill up the greyed cells only.

Technical Bid Checklist

Annexure-EEE

Tender No.			
Bidder's Name :			
		Compliance by Bidder	
SL. NO.	BEC / TENDER REQUIREMENTS	Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	Bidder to confirm that he has not taken any exception/deviations to the bid document .		
2	Confirm that the product offered strictly conform to the technical specifications.		
3	Confirm that the Offer has been made with Bid Bond / Bank Guarantee / Earnest Money along with the offer (Wherever Applicable) ?		
4	Confirm unconditional validity of the bid for 120 days from the date of opening of techno-commercial bid.		
5	Confirm that the prices offered are firm and / or without any qualifications?		
6	Confirm that all relevant fields in the on-line bidding format been filled in by the bidders for the items quoted by them.		
7	Confirm that the the price bid is in conformity with OIL's online bidding format ?		
8	Confirm that the Bid comply with all the terms & conditions ?		
9	Confirm that the offers and all attached documents are digitally signed using digital signatures issued by an acceptable Certifying Authority (CA) as per Indian IT Act 2000.		
10	CONFIRM THAT YOU HAVE SUBMITTED THE DULY SIGNED INTEGRITY PACT DOCUMENT (Wherever Applicable)		
11	CONFIRM THAT YOU HAVE SHALL SUBMIT PERFORMANCE BANK GUARANTEE AS PER NIT IN THE EVENT OF PLACEMENT OF ORDER ON YOU (Wherever Applicable)		
12	CONFIRM THAT YOU HAVE SUBMITTED DOCUMENTS AS PER GENERAL QUALIFICATION CRITERIA		

NOTE: Please fill up the greyed cells only.

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