ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

Materials & Contracts Department
(Rajasthan Project)
2A, Saraswati Nagar, Jodhpur-342005
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FORWARDING LETTER

Tender No. & Date **: SJG7481P18**

Tender Fee : INR 12,000/- OR USD 200

Bid Security Amount : INR 3,20,000/- OR USD 4,900
Bid Security Validity : 210 days from bid closing date

Tender sale period : 21.03.2018 to 19.04.2018

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

Pre-Bid Conference : **11.04.2018 (at 11.00 Hrs. IST)**
Pre-Bid Query Receipt last Date : **09.04.2018 (17.30 Hrs. IST)**

Bid Closing on : **26.04.2018 (at 11.00 Hrs. IST)**
Technical Bid Opening on : **26.04.2018 (at 15.00 Hrs. IST)**
Priced Bid Opening Date & Time : Will be intimated to the eligible Bidders nearer the Time.

Performance Guarantee : Applicable @ 10% of purchase order value.

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No./Mat. Code	Material Description	QTY.	UOM
10	SUPPLY OF TRUCK MOUNTED HORIZONTAL MOBILE STEAM GENERATOR (MSG) UNIT AS PER THE FOLLOWING ANNEXURE : a) Detailed Specification – Annexure - I. b) Bid Evaluation Criteria – Annexure - II. c) Technical and Commercial Check List vide Annexure - III	01	No.
20	INSTALLATION AND COMMISSIONNG	01	Lump sum

Special Notes :

1.0 **Pre-Bid Conference:** A pre-bid conference to explain Company's exact requirement and to reply queries of Bidders, if any, on the tender stipulations will be held on **11.04.2018** at 11:00 hrs (IST) in OIL's Project Office at 2A, District Shopping Centre, Saraswati Nagar, Basni, Jodhpur -342005, Rajasthan. Maximum of two representatives of each Bidder will be allowed to attend the pre-bid conference on producing authorization letter. Bidders interested to attend the Pre-Bid Conference should intimate DGM(M&C), Oil India Limited, Jodhpur latest by **09.04.2018**.

2.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/RP/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement uploaded along with the tender.

3.0 Technical Check list and Commercial Check list are furnished vide Annexure – III. Please ensure that both the check lists are properly filled up and uploaded along with "Techno-commercial Unpriced Bid".

4.0 The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. Indigenous bidder shall be eligible for Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/RP/GLOBAL/E-01/2005 attached. However, Indian bidders will not be issued Recommendatory Letter.

5.0 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 **The DGM(M&C), Materials & Contracts Department, Oil India Limited, Rajasthan Project, 2A-Saraswati Nagar, Basni, Jodhpur - 342005, Rajasthan** on or before **11:00 Hrs (IST)** on the Bid Closing Date mentioned in the Tender.

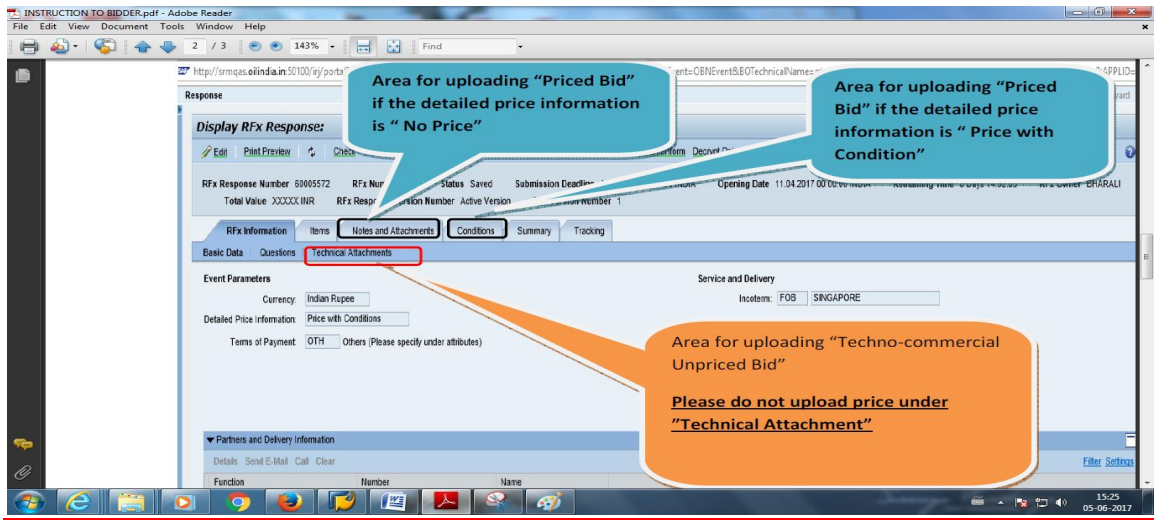
a) **Original Bid Security .**
b) **Details Catalogue and any other document which have been specified to be submitted in original.**

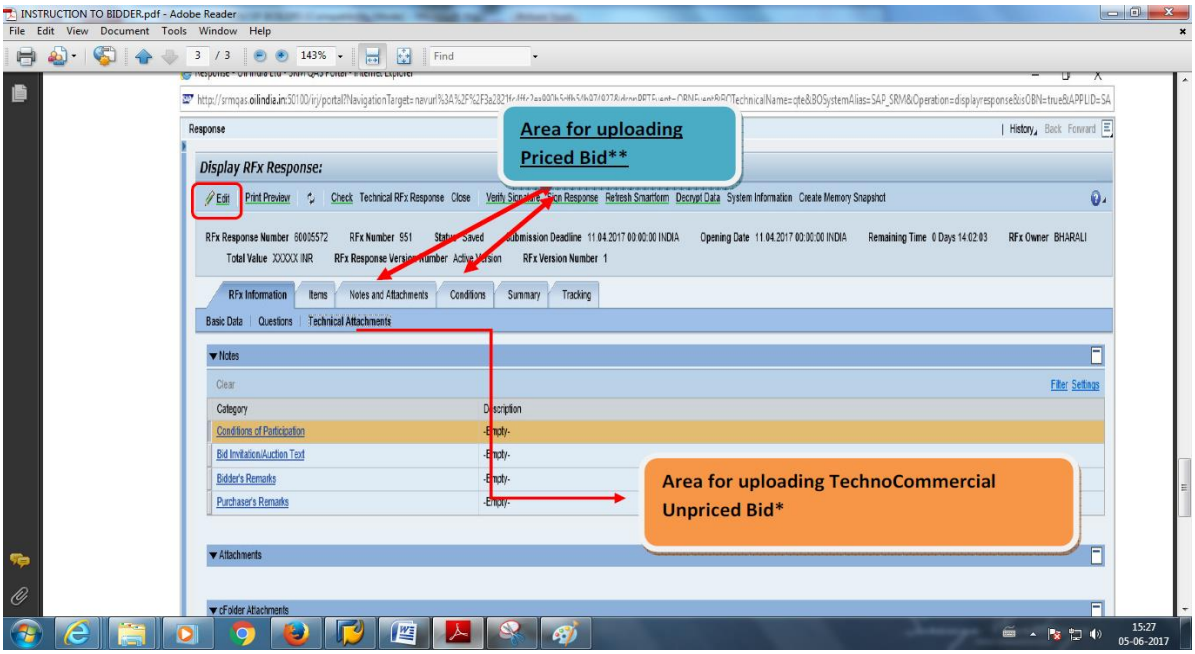
All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in triplicate.

6.0 In case of SINGLE STAGE-TWO BID SYSTEM, bidders shall prepare the "Techno-commercial Unpriced Bid" and "Priced Bid" separately and shall upload through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The "Techno-commercial Unpriced Bid" shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Price Bid Format / Commercial Bid to be uploaded as attachment in the Attachment Tab "Notes and Attachments".

Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the RFx Information > Technical Attachment 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 Attachments" Tab Page.** Details of prices as per Price Bid format/Priced bid to be

uploaded under “Notes & Attachments” tab. A screen shot in this regard is shown below. Offer not complying with above submission procedure will be rejected.





On “EDIT” Mode- The above 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 techno commercial details except the prices.**

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

7.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.

8.0 Other terms and conditions of the tender shall be as per "General Terms & Conditions" for e- Procurement as per Booklet No. MM/RP/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) and its amendments. However, if any of the Clauses of the Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/RP/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) of the tender and/or elsewhere, those mentioned in this BEC shall prevail.

8.1 With reference to clauses towards Bid Security and Performance Security in MM/RP/GLOBAL/E-01/2005, the following shall be applicable in connection with the Bank Guarantee.

(i) Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

(ii) Bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the original Bank Guarantee in OIL's tender issuing office / upload the same in OIL's e-tender portal along with the technical bid.

The bank guarantee issued by the bank must be routed through SFMS platform as per following details:

(a) "MT 760 / MT 760 COV for issuance of bank guarantee
(b) "MT 760 / 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, Jodhpur Branch, IFS Code - UTIB0000057; Swift Code: AXISINBB057. Branch Address - AXIS Bank Ltd, Prince Tower, Near Jaljog Circle, Residency Road, Jodhpur - 342003"

9.0 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 XII 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. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. **If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.**
OIL's Independent External Monitors at present are as under:

1. SHRI RAJIV MATHUR, IPS (Retd.),
   E-mail : rajivmathur23@gmail.com

2. SHRI SATYANANDA MISHRA, IAS(Retd.)
   E-Mail ID : satyanandamishra@hotmail.com

3. SHRI JAGMOHAN GARG, Ex-Vigilance Commissioner, CVC
   E-Mail id : jagmohan.garg@gmail.com

10.0 **GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT:**
10.1 To participate in OIL's E-procurement tender, bidders should have a legally valid digital certificate **of Class 3 with Organizations Name** having **encryption/decryption 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). **Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable**.

10.2 Bidders must have a valid User ID to access OIL e-Procurement site for submission of bid. Vendors having User ID & password can purchase bid documents **on-line through OIL's electronic Payment Gateway**. New vendor shall obtain User ID & password through online vendor registration system in e-portal and can purchase bid documents subsequently in the similar manner.

10.3 Parties shall be eligible for accessing uploading of their bid in E-portal after receipt of the requisite cost of the bidding document.

11.0 PURCHASE PREFERENCE **:**Purchase Preference will be applicable as per latest Govt. Guidelines. Bidders to take note of the same and quote accordingly. It is Bidder's responsibility to submit necessary documents from the Competent Authority to establish that they are eligible for purchase preference against this tender.

12.0 PRICE PREFERENCE **:** Price Preference will be applicable as per latest Govt. Guidelines. Bidders to take note of the same and quote accordingly. It is Bidder's responsibility to submit necessary documents from the Competent Authority to establish that they are eligible for price preference against this tender.

13.0 Purchase Preference (Linked to Local Content) shall be applicable against this tender. Please refer to Annexure-PP-LC.

14.0 GST Clause: Please refer to Annexure – GST.

(Anita Dam)
DGM(M&C)
For CGM-Services(RP)
For Executive Director(RP)

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SCOPE OF SUPPLY :

SUPPLY AND INSTALLATION & COMMISSIONNG OF TRUCK MOUNTED HORIZONTAL MOBILE STEAM GENERATOR (MSG) UNIT

QUANTITY : 01 No.

TECHNICAL SPECIFICATIONS :

1.0 Design, Manufacture, unitization and supply of a New Modern Truck Mounted Horizontal Mobile Steam Generator (MSG) unit as per following specifications:

2.0 **SCOPE OF WORK**:

2.1 To design and manufacture the Mobile Steam Generator.
2.2 To procure and supply truck chassis as per specification furnished in para 4.0 to 4.2 for mounting the Mobile Steam Generator Unit.

2.3 To unitize and install the steam generator unit on the truck chassis and to construct a weatherproof housing on the truck platform as detailed at para 5.0 below.

2.4 (a) To furnish necessary certificate/documents from competent Government authority and obtain permission from IBR, Rajasthan for operating the boiler in OIL's operational area.

b) To provide chassis documents in Form 21 & 22 (Copy enclosed) for registration of the complete unit in the name of M/S Oil India Limited, Rajasthan.

2.5 To commission the unit at site operating at the rated capacity and desired conditions to OIL's satisfaction.

2.6 To furnish three (03) copies of detailed operating and servicing manuals for smooth operation and maintenance of the unit. (Additionally one copy in a CD)

3.0 TECHNICAL SPECIFICATIONS: Detailed technical specifications of the Mobile Steam Generator are as under.

3.1 BOILER/STEAM GENERATOR: The boiler shall have the following features.

3.1.1 Duty Conditions: The boiler shall meet the following duty & working condition.

Steam output capacity	: 2200 ±10% kg/h
Max. Working pressure	: 160 kg/sq.cm (2275 psig)
Steam temperature	: 175-310 Deg C.
Steam Working Pressure	: 0.8-15.69 MPa
Max. Time allowed to generate steam at the rated output and pressure of 160 kg/sq.cm from cold start	: 3 to 5 minutes
Design code	: IBR 1950 / ASME
Water tank capacity	: 6m^3 or more
Fuel :Diesel	
Drive of Mechanisms	: Truck Engine
Control	: From driver's cabin/ inside carrier

3.1.2 Type: Fully automatic, Oil fired, once through, water tube, coil type, laterally wound, force circulation, forced draft, 3 pass design horizontal type.

3.1.3 Design code of Pressure parts: The pressure parts must be designed & made as per latest edition of ASME/IBR -1950 code.

3.1.4 Coil Tube design: The boiler has two concentric helical, closed pitch coils fabricated out of carbon steel, seamless tubes. The coils are connected to form continuous flow passage. This coil assembly is kept inside a shell assembly. The unit is horizontally mounted on a skid. Removable refractory cover mounted on the jacket covers the front of the unit. The pressure parts including inner and outer coils must be made out of seamless boiler quality alloy steel tube suitable for high temperature & pressure service.

The coil shall be technically wound with closed pitch except at the entrance of each pass. The winding shall be done in cold condition and the ovality of the tubes shall be within tolerable limits. The tubes shall be 100% radiographed at all circumferential welds before winding and the coils are fully stress relieved at elevated temperature as per IBR code requirement. The coil ends shall be flanged joined and independent of the feed water and main steam header. That is, replacement or maintenance of the tube bundle shall be independent of the headers.

3.1.5 Shell Design: The shell assembly comprises of a double shell arrangement containing the pressure parts as described above and to preheat the combustion air between the shells along with suitable radiator to reflect radiant heat to the convection zones. Necessary refractory work at the burner and far end shall be provided, using proper quality materials. The far end shell must be independent of the coil bundle. That is, the far end wall should be easily removable without disturbing the coil for maintenance.

The shell shall be provided with a peephole for visual inspection of fire.

3.1.6 Fuel: The fuel for generating steam should be high-speed diesel (HSD). The bidder shall indicate the gross calorific value of the fuel and fuel consumption per hour at rated output.

3.1.7 Feed water quality: The bidder shall specify the feed water quality for smooth and efficient operation of the unit.

3.1.8 Prime mover (Pilot engine) of Genset: The unit shall be equipped with an air cooled, vertical, naturally aspirated, inline diesel engine of suitable HP for continuous running (24 Hrs.) with an overload capacity of 10% for a period not exceeding one Hour in any 12 hours running when running at 1500 R.P.M. as per site conditions given below and shall conform to specifications IS:10000/BS:5514. The Governing is to be in accordance with Class A-2 specifications to IS: 10000/BS: 5514.

CLIMATIC CONDITION:

Components International System (SI)
Ambient Temperature (Max. / Min.) 50 / -1 Deg C
Humidity (Max.) 40-60%
Average Rainfall 25 mm/year
Wind velocity (Max.) 128 KM/Hr
Frequecy of Sand strom March to September and occasional during the remaining period.
Seismic Zone III, Moderate
Weather Four distinct seasons - Pre monsoon, monsoon, post-monsoon and Winter
Topography of Site Part of Thar Desert

The engine should be of reputed manufacturer like KIRLOSKAR/RUSTON/ CUMMINS/ CATERPILLAR / GREAVES, complete with, charging alternator, electrical self-starter with suitable maintenance free battery, drive pulley for power take off, air cleaner, fuel filter & speed regulator to run (a) air blower (b) fuel pump, (c) feed water pump and (d) Charging alternator of the Mobile Steam Generator. All the above units shall be direct belt driven. Belt guard shall be provided on all the V-belt assemblies. A suitably selected flexible coupling should be incorporated to transfer power from the engine to the Alternator.

Suitable spark arrestor with silencer along with necessary piping covered with exhaust lagging shall be provided at the engine exhaust and the engine exhaust shall be provided outside the boiler hut and it shall be suitably insulated.

The engine shall have minimum 20% reserve HP. Power balance for the unit i.e. generation and consumption of power shall be clearly indicated in the bid. Alternative arrangement shall be provided for manual starting of the engine. The engine shall be firmly anchored to the skid, using vibration isolator of reputed make like DUNLOP.

The minimum requirements for the engine shall be as below –
a. Suitable air cooled diesel engine of adequate power and conforming to latest EURO-IV emission norms. (Engine emission norms certificate shall be submitted along with documents as mentioned in 7.0 (iii) by the supplier.

b. The engine shall be complete with Digital / manual Tachometer & Hour meter in addition to all standard Lube oil pressure gauges & meters, starting switch, ignition switch, ammeter, filters, spark arrestor etc. Emergency/Safety engine shutdown system in case of Low lubricating oil pressure &over speed should be provided. Anti-vibration mountings and Engine "Low Lube Oil Pressure" indication display red lamp should also be provided.
c. 12 V engine electric starter (Lucas or Delco Remy make) with heavy duty maintenance free battery enclosed in a safety enclosure, engine mounted Battery charging Alternator (Make: LUCAS TVS or equivalent reputed make) and Starting ring fitted to the Engine Flywheel should be provided.

d. The Fuel System should comprise of Mechanical Governor, Fuel Injectors, Fuel Pump, Fuel Filter Assembly, Fuel lines and Fuel Tank having storage capacity to meet the Fuel requirements of 12 hours of full load operations.

e. The engine with all other accessories, tanks, etc. shall be installed on a suitable skid with removable type steel protective frame cage equipped with lifting lugs for lifting of the complete unit. The skid shall have provision to facilitate installation of the same on a truck platform.

f. Lubricating System: The Lubricating System should comprise of Gear driven lubricating Oil Pump, Lubricating Oil Filter with a replaceable Filter Element, Lubricating Oil Cooler, Lubricating Oil Pan, Oil level dipstick and

Crankcase breather.

g. Engine to be supplied with standard painting and it should have SAE standard rotation.

NOTE: The bidder should submit the following information along with relevant performance rating curves and engine product catalogues.
i) Gross HP developed at rated RPM
ii) Deduction of blower fan, charging alternator and other ancillary equipment
iii) Net HP developed at rated RPM
iv) Fuel consumption at rated power as 110%, 75%, and 50% of rated load.

In case of above system, the alternator, its control panel, lighting scheme, earthing scheme, electrical works & cabling etc. will be as per clause (3.1.9) – A/B//E/F/G below.

3.1.9 ELECTRICAL SYSTEM

A. Alternator:

All pumps & blower will be electrical motor driven. The details of electrical system & devices are as under:

Power for all electrical equipment inside the MSG unit shall be provided by an air cooled diesel engine driven (as mentioned in 3.1.8 above) acoustically enclosed 3 – phase alternator. Air blower, fuel pump, feed water pump shall be driven by directly coupled electric motors. The alternator prime mover/engine shall have all the features of the engine stated above. The continuous alternator KVA output at 50 deg. C ambient shall be more than the sum of starting KVA of the largest motor and the maximum total running KVA of other electrical equipment. The engine shall be able to provide the required power during motor starting & running. The
engine output rating shall be on continuous basis at 50 deg C ambient and at rated alternator output KW. The engine & alternator rated output on continuous basis shall be at least 20% more than the continuous running electrical load. The bidder shall submit detail calculations for KVA rating of alternator & KW rating of the engine along with the bid.
Alternator shall conform to IS: 13364/IEC 60034.
The alternator shall meet the following technical specifications and conform to relevant BIS
1. Rated voltage: 415V (+/-) 6% AC.
2. Rated frequency: 50 Hz (+/-) 3%, 1500 RPM
3. Phase system: 3 phase, 4 wires.
4. Power factor: 0.8 lagging.
5. Class of insulation for stator, rotor: F/H.
6. Phase sequence: UVW.
7. Rating: Continuous.
8. Connection: Star.
9. All windings should be made from electrolytic grade virgin copper.
10. Alternator Internal protection (enclosure): IP 23
11. Alternator cable terminal box protection: IP 54.
12. Excitation system: Brushless Self excited & auto regulated.
13. The automatic voltage regulator shall ensure that voltage dip during starting of highest size motor with other electrical loads running at rated output shall not be more than 10% of the alternator rated voltage.
14. Mounting: Foot mounted.
15. Suitable cable termination box for four core, copper conductor, steel armoured PVC insulated cable connection.
16. Alternator is to be mounted on anti-vibration pads.
17. Alternator shall have two external grounding terminals.
18. The following information in respect of the alternator shall also be provided:
(i) Rated output, (ii) Motor starting ability (iii) Voltage swing when rated load is suddenly switched on (iv) Overload capacity (v) Short circuit withstand capacity (vi) Automatic voltage regulation (vii) Unbalanced current withstand capacity (viii) efficiency of alternator at 25%, 50%, 75% & 100% load (0.8 PF)
19. Alternator make shall be Stamford/ Kirloskar/ NGEF/Crompton Greaves. Alternative make if offered will be subject to OIL's approval.
20. Alternator shall be guaranteed for a period of one year from the date commissioning of the unit.
21. The alternator along with the Prime mover shall be housed in an acoustic enclosure.

B. CONTROL PANEL:

Suitable Industrial type SLC/PLC based (Non redundant, Non compartmentalized and Non Draw out type) control panel shall be provided for the alternator. The panel shall comprise of the following:

i)Four pole, 415V MCCB, minimum 25 kA breaking capacity, continuous current rating (AC23 duty) 25% higher than the gen set full load current, adjustable (in both current and time) microprocessor controlled overload, short circuit and ground fault release, with shunt trip coil, quantity – 1 no. Make: Schneider (NSX series)/Legrand (DPX3 series)/Siemens (3VT series)/ABB (Tmax series)/Indo-Asian

ii) 1 No. 3 phase, 4 wires, Microprocessor based, Over and Under Voltage
Monitoring Relay for the following protections for the alternator (Make: Schneider (Model RM3 TR114VS7)/ProkDvs(Model-LVM11-34-2CF)/ABB Ltd.)
1) Over voltage - 110 %
2) Under voltage - 85 % with 1- 10 seconds time setting
3) Incorrect phase rotation

iii) 1No. Over and Under frequency monitoring relay from 40 to 60 HZ with
accuracy 0.1%, suitable for 415V. Trip time 0-10Sec with LED indication, 2NO+ 2NC contact, Make: ProkDvs (Model –HILO-2C-F)/ Minilec (FCS D2)

iv)One no. Digital Multifunction for display of V, I, KW, Frequency, KWH shall be provided in the panel. Current Transformer: Output 5 A or 1 A of reputed make at rated primary current. Burden – 15 VA, Class-I; Quantity – 3 nos.; Make of meter: HPL-Socomec (Diris A40)/Schneider (EM 6400 series). Make of CT: Kappa/A.E./L&T.

v)MCB ('C' curve) for protection of meters and earth leakage relay.

vi)LED indication lamps for indication of incoming 3 phase power supply;
Quantity – 3 nos.

vii) Other components like pushbuttons, as required

Sub Notes for Panel:

N.1The generator control panel shall be industrial type, self-supporting, floor mounting, built with rigid framework of suitable size MS Angle/Channel of sufficient strength with vibration dampers, dust & vermin proof made of 14SWG CRCA sheet steel, cubicle type conforming to IP54, having front and rear hinged doors with locking arrangement, danger plate fitted on both sides, lifting lugs on top, ventilation louvers with perforated sheet on both sides, detachable gland plates for easy & safe entry of cables, double earthing studs on two sides complete with suitably sized zinc plated &passivated double nuts and spring washers.
N.2 Control panel shall be thoroughly cleaned before applying 2 coats of rust preventing primer followed by 3 coats of light grey paint as per BIS code.
N.3 All control wiring shall be done with 1100V grade, single core 1.5 sq mm, ISI, FIA, TAC approved and marked, PVC insulated, flexible copper cable. CT and Ammeter wiring shall be done with 2.5 sq mm copper cable. CT wires shall be terminated with ring type lugs. All wires shall be numbered with ferrule for Identification. Make: Finolex / Havel's /equivalent reputed make.
N.4 All power connections inside the panel shall be made with copper wire or copper straps of current rating as per MCCB rating. Generator output terminals shall be connected to the control panel input at heavy duty terminals with 1100V grade, heavy duty, ISI approved and marked, PVC insulated, flexible copper conductor cables in heavy duty metallic flexible conduit.
N.5 The overall dimensions of the panel shall be sufficient for safe and

comfortable working inside the panel. Panel shall conform to IS: 8623/equivalent IEC Standard.

viii) C. ELECTRIC MOTOR

Induction motors of suitable rating (with adequate reserve HP) & RPM shall be provided for running the air blower, fuel pump and feed water pump. The motors shall have the following minimum specification:
a) Voltage: 415V (+/-) 6% AC.
b) Frequency: 50 Hz (+/-) 3%
c) Duty: S-1 (Continuous)
d) Enclosure: Totally enclosed Fan cooled (TEFC)
e) Class of insulation: F but limited to temperature rise of B class insulation.
f) Degree of protection: IP: 55.
g) Suitable cable termination box.
h) 2 nos. suitable earth terminals shall be provided.
i) Standard: Motor should confirm to IS-325 for performance.
j) Motor shall be guaranteed for one year from date of commissioning of the unit.
k) Make: Kirloskar/Crompton Greaves/Bharat Bijlee/ABB.
The motors shall be directly coupled through direct, flexible couplings & complete with coupling guards.

D. MOTOR CONTROL CENTER:

A suitable MCC panel shall be provided for starting of the air blower, fuel pump and feed water pump motors. As the MCC panel also will house the boiler controls (with sensitive PLCs and other instrumentation), sufficient and proper isolation/space shall be provided for instrumentation items and high voltage interference generating items like contactors/MCCBs etc. of motor starters.
The MCC panel shall have the minimum technical specification as under:
(a) INCOMER: Qty. – 1 no. It shall be supplied from the output of the generator control panel. It shall comprise the following:
(a1) MCCB, 4 pole, minimum 25 kA breaking capacity, continuous current rating (AC23 duty) as per design of control panel, adjustable (in both current and time) microprocessor controlled overload, short circuit and ground fault release, with shunt trip coil, qty – 1 no. Make: Schneider (NSX series)/Legrand (DPX3 series)/Siemens (3VT series)/ABB (Tmax series)/Indo-Asian
(a2) Earth leakage relay with core balance current transformer. Range – 0.3 Amp to 3.0 Amp with adjustable time delay, indication LEDs, test and reset push button: Qty – 1 no. ELR shall trip the MCCB in case of an earth leakage. Make: Schneider/Legrand/ABB/Siemens.
(a3) Analogue ammeter (with selector switch) with current transformer, 5 A or 1 A secondary at rated primary current. Burden – 15 VA, Class-I; Qty – 3 nos; Make of meter: reputed. Make of CT: Kappa/A.E./L&T.
(a4) Analogue voltmeter with selector switch
(a5) Control MCBs ('C' curve) for protection of meters – as required

(b) BUSBAR: A suitable length of 4 nos. (Three phases and one neutral) electrolyte grade high conductivity tinned copper bus bar shall be provided. Continuous current rating of the bus bar shall be two times the current rating of the panel incomer MCCB. Bus bar insulation support material shall be non-hygroscopic SMC/GRP. Bus bar shall be insulated with colour coded heat shrinkable PVC Direct on line (DOL) starters for motors up to 5 HP and star/delta starters for motors above 5 HP shall be provided along with one no. spare starter for highest sized motor.
Besides starters one no. lighting feeder (Fitted with MCB and switch) and one no. spare feeder (Fitted with 25 amps 4 pole MCCB) shall be provided. Starters shall have following components:

(c1) Incomer MCCB, 3 pole, microprocessor controlled overload and short circuit release; suitably rated MPCB may also be offered matching the motor HP/kW.
Make: Schneider/Siemens/ABB/Legrand/Indo-Asian.
(c2) TP power contactor with auxiliary contacts. Make: Schneider/ABB/Siemens/Indo-Asian.
(c3) Thermal overload relay within built single phasing preventer. Qty. – 1 No: Make: Same as contactor.
(c4) Timer for star/delta starter, make: Schneider/ABB/Siemens
(c5) Start & Stop push button (if not controlled through PLC) Qty. – 1 set; Make: Siemens/L&T
(c6) ON/OFF/Trip LED Indication: Qty. – 1 set; Make: Siemens/L&T.
(c7) MCBs for control circuit

Sub-Note for MCC Panel:

N1. The MCC panel shall be industrial type, self-supporting, floor mounting, built with rigid framework of suitable size MS Angle/Channel of sufficient strength with vibration dampers, dust and vermin proof made of 14SWG CRCA sheet steel, cubicle type conforming to IP54, having front hinged doors with locking arrangement, danger plate fitted on both sides, lifting lugs on top, ventilation louvers with perforated sheet on both sides, detachable gland plates for easy & safe entry of cables, double earthing studs on two sides complete with suitably
sized zinc plated & passivated double nuts and spring washers.
N2. MCC shall be thoroughly cleaned before applying 2 coats of rust preventing primer followed by 3 coats of light gray paint as per IS code.
N3. All control wiring shall be done with 1100V grade, single core 1.5 sq.mm, ISI, FIA, TAC approved and marked, PVC insulated, flexible copper cable, CT and ammeter wiring shall done with 2.5 sq.mm copper cable. All wires shall be numbered with ferrule for identification. Make: Finolex/ Havell's.
N4. All power connections inside the panel shall be made with copper wire or copper straps of current rating as per individual MCCB rating. Motors should be connected to the respective panel at heavy duty brought out terminals with 1100 V grade, Heavy duty, ISI approved and marked, PVC insulated, PVC sheathed, Galvanized steel armoured, stranded
Copper conductor cables. Heavy duty single compression cable glands shall be used for all cable entries. Make of Cable: Finolex/Havell's/L&T/reputed
N5. The overall dimensions of the panel shall be sufficient for safe and comfortable working inside the panel. Panel shall conform to IS: 8623/IEC equivalent.
It is to be noted that the MCC panel shall also house the PLC/SLC controls and instrumentation. Hence the section 3.5, MSG Control Panel and Instrumentation, shall also be referred while designing the MCC.

E. EARTHING DETAILS:

The entire earthing work shall conform to IS: 3043. Two nos. 25x5 mm galvanized GI straps shall be mounted suitably inside the unit, which will act as parallel earth bus bars. Two nos. earth connections (either with suitable size GI straps or GI wire rope, suitably terminated with crimp type lug) from alternator, motors, control panel & MCC shall be connected to these straps so as to ensure two earth connections for each device. The generator neutral shall also be earthed to the earth straps with suitable sized insulated copper cables. Earthing scheme shall be as per IS: 3043.

F. ELECTRICAL WORKS & CABLES
Entire electrical installation work will be as per BIS/IEC, CEA Regulations& NEC codes. All items used shall conform to relevant IS. The layout plan &
electrification work shall be planned considering safety of operating staff,
equipment & maintenance aspect.

Bidder shall refer equivalent international standards for items where only Indian Standards (as per BIS-Bureau of Indian Standards) has been mentioned.
All cables will be terminated through suitably sized Heavy duty single compression glands and connections will be made through properly rated terminal strips and tinned copper sockets crimped rigidly to the copper conductors.

G. ILLUMINATION AND LIGHTING DETAILS:
Interior of the unit shall have sufficient illumination with minimum 3 nos. of industrial type, 240V, IP55 bulkhead/well glass fittings with mercury vapour (125 w) /CFL (23 w) lamps. These shall be wired with metallic conduit wiring/armoured cable wiring using stranded copper conductor cables approved by ISI. Make of light fittings: Philips/Bajaj/Crompton/GE.
MCB shall be used as switches for illumination system and shall be housed in metallic enclosure, properly earthed. One no Industrial type socket outlet of 10 amps with 10 amps MCB shall be provided inside the unit. Make:
Schneider/Siemens/ABB/Legrand.

H. DOCUMENTS:
Complete electrical/instrumentation control scheme (with schematic drawings, component details and indicative bill of materials) for details of electrical system including gen set, control panel, earthing, illumination, MCC, Motor, PLC controls, wiring scheme shall be submitted with the offer for OIL's approval.
Three sets of above scheme (after OIL's approval)along with test report, inspection report and all drawings of electrical system and guarantee certificate for electrical items shall be submitted with the unit.

3.1.10 FUEL BURNING COMBUSTION SYSTEM: The fuel burning system of the boiler should comprise of the following –

a) BURNER: The burner should be pressure jet, direct electric spark ignition type using spark electrodes/plugs and high tension power supply from inverter/magneto of a well proven design comprising of burner gun, electrode, air fuel mixing devices, ignition transformer and other accessories if any, all rated for continuous duty service. The burning system should be adequate to produce heat required for generating steam at the desired rate within 3 to 5 minutes of cold start. Make – Monarch/Invalco/Hauck Manufacturing Company (ELSTER) etc. Manual describing combustion principle for steam generation is to be submitted.

b) COMBUSTION AIR BLOWER: Centrifugal type air blower of suitable capacity is to be driven directly either by the diesel engine through belt drive or by directly coupled electric motor complete with all the accessories for power transmission. It should also be provided with an over pressure relief valve.

c) FUEL PUMP: Gear type fuel pump suitable for pumping HSD or any second grade fuel oil, either mounted on the same shaft as that of the air blower driven by the diesel engine through belt drive or by directly coupled suitable electric motor. The fuel pump should be complete with all accessories required for power transmission. It should also be equipped with internal over pressure relief arrangement/automatic by-pass control valve. Make – Sofag, Sunstrand or Neel or equivalent reputed make. The position of the pump should be easily accessible for maintenance.

d) DIESEL OIL TANK: HSD tank of suitable capacity, based on the feed water tank capacity and fuel consumption rate, for continuous full load operating time made of MS sheet, complete with inlet and drain nozzles fitted with valves, graduated level gauge shall be firmly anchored to the skid to withstand severe wrenching and shocks. Necessary MS pipings up to the diesel engine and boiler fuel pump should be provided.

e) MANUAL HSD FILLING PUMP: 1 hand operated HSD filling pump (gear type) complete with suction and discharge flexible rubber hoses for filling HSD tank should be mounted near the tank. While the length of the discharge hose shall be as per assembly requirement, the length of the suction hose shall not be less than 40 ft.

3.1.11 FEED WATER PUMP: Triplex reciprocating plunger type positive displacement pumps of suitable capacity of a reputed manufacturer like SPECK etc. to be driven either by the diesel engine through belt drive or by directly coupled suitable electric motor complete with all accessories for power transmission. The pump shall be complete with fluid over pressure relief valve, suction stabilizer and pulsation dampener. The bidder should clearly specify volumetric capacity, pump HP and other technical details. Piping should be provided for connecting the water pump to the coil inlet. A suitable strainer should be provided at the suction of the pump to remove foreign materials. The position of the pump should be easily accessible for maintenance.

3.1.12 FEED WATER TANK: Tank/s made of MS sheets (Plate thickness min. 5 mm) with suitable anticorrosive paint of capacity not less than 6000 litre, fitted with inlet, outlet, drain and vent nozzles (in each tank) fitted with valves, level indicator/gauges shall be provided. The tank shall be properly designed to reduce water surging on turns and withstand violent wrenching and shocks. It shall be firmly anchored to a skid mounted above the chassis as shown in the attached layout diagram. The tanks shall be easily detachable from main unit for cleaning and maintenance without dismantling other units. If the tanks are made in several sections, then each section shall have isolating valve and individual tank drainage facility. Suitable air vent nozzle shall be provided in each tank to eliminate air pockets while filling
up. Proper care shall be taken that the tanks are suitably connected to the feed water pump and there is no starvation of water to the pumps. Suitable provision shall be made to reduce metal to metal friction for longevity of the tanks.

3.1.13 STEAM HEADER: The steam header for mounting safety relief valves, steam pressure indicator, high steam pressure switch, coil blow down valves including steam stop, auxiliary and check valves. The steam header shall have flanged ends for mounting all the valves. It should be placed at the Right hand side of the Unit.

3.1.14 DUCTING: Ducting should be provided for the flue gases from outlet of the boiler complete with a rain head outside the boiler housing.

3.2 PIPING: Piping to connect water pump, boiler as well as steam outlet sho uld be of boiler quality du1y certified by the competent authority. Suitab1e insu1ation shou1d be done up to the rear of the boiler housing. Drain piping for fuel, feed water and steam coil should be suitably provided.

3.3 STEAM HOSE/PIPE: 1. 38mm (1-1/2") NB 12-metre-long three nos flexible metal braided high pressure hose for steam working pressure of 160 kg/sq.cm at 250-350 Deg C. complete with quick release coupling at each end should be provided.

2. A set of 38 mm (1-1/2") NB pipes (of various length) of 160 kg/sq.cm working pressure with hammer union (one end of pipe male and other end female) (for steam operation) at each end of pipes should be provided for a total length of 30 meters. The far end of the pipe should be 12m away from the steam outlet of the boiler along the ground. Accordingly, necessary elbows/bends and short joints with quick release couplings should also be provided. The steam is to be injected into the well to heat the heavy oil so that it becomes easier for the oil to flow to surface with the help of artificial light. Additional hammer union: Qty: 3 nos; Reducer : 1 ½" inch to 1" –Qty-2 nos; NRV 2 " Qty: 2 nos, ; Reducer : 1 ½" inch to 1/2" –Qty-2 nos; Tee, ½" : 4 nos; Socket, 1 ½" : 3 nos. All these items will be of IBR quality.

3.4 VALVES: The boiler should be equipped with 3 nos. each of coil blow down valves (at suitable position for easy operation), safety relief valves, steam stop valves and feed check (non-return) valves for coil blow down, over pressure release, steam shut off and preventing reverse flow respectively. These va1ves are minimum requirement for the unit.

All the valves shall be IBR quality flanged type valves. The bidder has to provide necessary document in support of this along with the quotation.

3.5 MSG CONTROL PANEL AND INSTRUMENTATION:

A. Control panel shall be designed based on microprocessor based state of the art technology Programmable Logic Controller (PLC)/Sequence Logic Controller (SLC) system suitable for Mobile Steam Generation (MSG) operation and control. The fault functions shall be both visually and audibly indicated on the unit's control panel and shall remain 'ON' until manually reset. It will have sequence starting system to ensure that all functions associated with starting operation are performed in correct sequence. The initiation shall be by means of a switch of push type, on the unit control panel. Provision shall also be incorporated for emergency shutdown of the MSG unit. The MSG units shall be provided with automatic safety shutdown devices and annunciation system with fuel cut-off.

SHUTDOWN DEVICES WITH AUDIO-VISUAL ALARM FOR THE FOLLOWING CONDITIONS SHOULD BE OFFERED
i. Flame failure

ii. Steam Pressure high

iii. Steam Temperature high
iv. Low feed water pressure

v. Low fuel oil pressure

vi. Blow down valve open
vii. Low air pressure

SEQUENCE AND CONTROL FOR THE FOLLOWING CONDITINS SHOULD BE OFFERED
vii. Primary safety checks

viii. Start of blower fan and fuel pump

ix. secondary safety checks

x. Start ignition and fuel supply

xi. Prove Flame establishment
xii. Continue operation till high steam pressure reached

xiii. On-off operation set pressure failure

xiv. Safety lock out for flame or any other safety shutdown condition as mentioned above

B. Field and panel mounted indicating instruments shall also be available to monitor various process parameters.

Panel mounted indicating meter (Analog type, preferably 4–20 mA)

i. Steam temperature (Analog type input, preferably 4-20 ma)

Panel mounted Indicating lamp & Switches

Indicating Lamp:

ii. 230 V AC ON

iii. Safety Lockout Internal

iv. Start

v. Flame ON

vi. Water Pump On
vii. Water Pump Off

viii. Water Pump Trip

ix. Fuel Pump ON
x. Fuel Pump OFF

xi. Fuel Pump Trip

xii. Air Blower ON

xiii. Air Blower Off

xiv. Air Blower Trip

xv. Steam Temperature High
xvi. Steam Pressure High

xvii. Low Steam Pressure

xviii. Low Air Pressure
xix. Low Fuel Pressure

xx. Low Fuel Oil level

xxi. Low Feed Water level
xxii. Blow down valve open status

Switches (Push Buttons):
xxiii. Start push button.
xxiv. Stop push button.
xxv. Alarm Test push button.
xxvi. Alarms accept PB.
xxvii. Alarm reset PB.
xxviii. Start PB for water pump.
xxix. Stop PB for water pump.
xxx. Start PB for fuel pump.
xxxi. Stop PB for fuel pump.
xxxii. Start PB for air blower.
xxxiii. Stop PB for air blower.
xxxiv. Auto/Manual water pump selector switch.
xxxv. Auto/Manual fuel pump selector switch.
xxxvi. Auto/Manual air blower selector switch.
xxxvii. 230 V AC power ON/OFF switch.

Field mounted instruments (Analog type)

i. Steam Pressure gauges

ii. Feed water pressure gauge
iii. Steam temperature gauge
iv. Indicating thermostat or temperature switch for steam temperature, with a set point for high temperature(superheat alarm)
v. Steam pressure switch for both high & low
vi. Air pressure switch
vii. Pressure switch for fuel oil
viii. Pressure switch for feed water
ix. Level switch for fuel oil level
x. Level switch for feed water level
xi. Limit switch for blow down valve
xii. Alarm rest, engine start and main switch
xiii. Tachometer, lube oil pressure ndicator, temperature indicator for the diesel engine.

C. Ignition of burner should be carried out using ignition transformer and ignition electrodes operating at 230 V AC, 50 Hz.

D. Steam temperature controller function shall be incorporated in the control programme.

E. A low voltage/under voltage (less than < 180 V AC) indication of Instrument Panel incoming power (230V AC, 50 Hz) to be provided.

F. All three phase (415V, 3PH, 50Hz) motor starter relays, overload relays, current transformers etc should be placed in the control panel in such a way that no high voltage interference will occur in the PLC side. Therefore, the control panel should be designed like that upper half of the panel should include all instrumentation items and lower half of the panel should include all three phase electrical component including ignition transformer with proper isolation.

G. The control panel shall be mounted in such a way that it can absorb maximum shock/vibration since the panel is truck mounted and truck is required to move very frequently, sometimes on bad road condition and in sand dunes also.

H. The control panel shall have an entry for easy access and shall be suitable for use in IP-65 environment. The control system shall be designed in such a way that failure of portion of the system shall not jeopardize the health of the MSG unit i.e. the health of various auxiliaries as well as the steam generation availability shall be always ensured.

I. All the indication as well as sequence, interlock, startup and safety shutdown through PLC using analog/digital I/O cards. Also preferred analog/digital indication in the panel as mentioned in Para 2.0.

J. The control panel shall include a programmable logic controller (PLC) with the following features to cater the operational need of the boiler.

i. Indication of status of inputs and outputs for easy debugging

ii. Expandable inputs/outputs
iii. Program memory held in EPROM

iv. Communication port for connection to PC or laptop computer

v. Designed to work in boiler environment

vi. Battery back-up for retaining memory in case of power failure

K. Control cabinets shall be industrial grade, enclosed type and shall be designed for bottom entry for cable connection and cabinet structure shall be rigid. Cabinets shall be equipped with easy access door and door shall be equipped with lockable handles and concealed hinges. All cable entry to the cabinet shall be properly rooted through conceal tray/conduit. Proper illumination shall be provided with operating door switch inside the cabinet.

4.0 TRUCK UNIT
Brand new Truck chassis of Make: Tata/Ashok Leyland/Volvo or equivalent as per the following specifications, Fitments & Accessories, Terms & conditions, etc. The make and model of the truck chassis offered is to be clearly indicated in the bid. Bidder should provide technical leaflet of the offered truck chassis along with the bid.
(A) CHASSIS
i. Drive: 6x4 Drive with power steering system. (One single non
powered front axle & two Powered rear axles.)
ii. Cowl: Full forward Control.
iii Engine: Suitable water cooled diesel engine of adequate HP.
iv. Emission norms: Latest applicable emission norms.
v. Gearbox - Minimum 5 forward speeds & 1 reverse speed.
vi. Steering - Hydraulic Power Assisted steering system.
vii. Wheelbase – In the range of 4800 mm -4910 mm.
viii. Overall length – As per OEM design.
ix. Maximum width – As per OEM design. (As per Indian MV Acts.).
x. Suspension –As per OEM design.
xi. Maximum permissible GVW not less than 25,000 kg. (Note para 4.1 b).
xii. Rear overhang (ROH): ROH should be as per original chassis.
Extension of Chassis to accommodate Steam Generator unit/rear housing is not acceptable.
xiii. Brake: Duel circuit Full Air Service Brake and spring Actuated
Parking Brake acting on rear wheels.
xiv. Wheels & Tyres: Tyre size- min. 10.00x20. (with tube)
xv. Electrical system: 12/24 volt as per OEM design.
xvi. xv. Ground clearance: - As per OEM Design.

(B) DRIVER'S CABIN

Factory Built cabin with following specification/accessories -

i. All steel structure construction with non-slippery Chequered Plate flooring.

ii. 2(two) lockable doors with glass window (moving up & down).
iii. Side windows on both sides with lockable sliding glass. 1(one) No, full-length rear window with sliding lockable glass and steel wire mesh guard.

iv. Adjustable driver's seat with shock absorber.

v. 1(one) No. Co-driver's seat on the left side of the driver's seat. Additional 1(one) bench type seat made of foam rubber cushion with full backrest suitable for minimum 3 (three) persons at the back of drivers' seats. Total seating capacity of the cabin is to be for min. 5 persons.

vi. Suitable roof lamps and two fans.

vii. Windscreen of laminated non-splinter glass. Sliding window glasses of toughen type.

viii. The roof of the driver cabin (from inside) should have proper upholstery with heat resistance insulation to prevent heat radiation.

(C) OTHER FITMENTS & ACCESSORIES

a. All standard equipment, gauges and meters, air horn, lightings, reflectors, sunshades, lockable fuel tank with strainer, standard tool kit, lockable toolbox (inside the cabin), hydraulic jack, handle & wheel wrench, mud flaps, etc.

b. One additional lockable toolbox of size min. 1.00m x 0.50m x 0.50 m under the truck platform at suitable location.

c. 2(two) Nos. large rectangular rear view mirrors on each side of the cabin.
d. Well-covered lockable Battery Box preferably outside the driver's cabin, suitable mounting arrangement for the spare wheel and towing hooks at rear and front.

e. Audio alarm (Reversing Horn) at reversing of the vehicle.

f. First Aid Box, Glove Box, Fire extinguisher(s) and all other statutory fittings/accessories as per Indian MV Act.

(D) PLATFORM

a. A suitable platform is to be constructed on the truck chassis to mount the skid(s) with all the items of the Steam Generator Unit (SGU) described at para 3.0 to 3.5 above and to construct a weatherproof housing as detailed at para 5.0 below. The skid shall be properly mounted and for the same, adequate number of cross members in the skid is to be provided. Width and length of the platform should be as per original width of cowl/driver's cabin and length of chassis. Extension of chassis to accommodate the skid(s)/housing of SGU or any additional overhang of the housing is not acceptable.
b. The platform is to be made out of MS channels with min. 5 (five) mm thick MS chequered plate flooring.
c. It should be strong enough to carry the load of all the equipment and
should withstand shock loads during movement.

d. For aesthetic look, extended panelling of the canopy housing is to be made to cover the tank portion of the unit. This extended portion shall either be screwed with the main panelling or is to be fixed with hinge with the main housing frame. In case of hinge, proper anchoring is to be made to hold the lifted panel.
e. The mounting of all equipment/machineries etc. on the rear platform should be of uniform load distribution for proper balancing of the vehicle.

4.1 SELECTION OF TRUCK CHASSIS

a. The total weight of the Steam Generator Unit with full capacity water, housing (rear cabin of SGU), all fittings etc., as described at para 3.0 to 3.5 above & 5.0 below is to be indicated in the bid. Approx. weight of the truck with driver's cabin & platform is also to be indicated.

b. The Laden Weight of the unit shall be within the maximum Permissible Gross Vehicle Weight (i.e. sum of Axle Capacities of all axles i.e. GVWR) of the unit. { Laden Weight means-Weight of the complete unit with all equipment & fittings i.e. weight of the chassis with driver's cabin +weight of the all equipment permanently mounted on the unit + weight of the other tools, accessories, etc. generally being carried/kept in the unit, spare

wheels, oil, etc. Accordingly, Laden Weight is the sum of actual loading on each individual axle.} Accordingly, the truck chassis specifically with respect to GVW, Engine HP & Wheelbase is to be selected and offered/quoted.

c. Positioning of the items of the SGU on the platform should be such that the load is distributed evenly on the platform.

4.2 PAINTING

Exterior of Driver's cabin - Deluxe Imperial Crimson.
Interior of Driver's cabin - Light shade as per standard.
Chassis & undercarriage - Rustproof painting.

5.0 UNITISATION & SPECIFICATIONS OF HOUSING:

a. The mobile steam generator shall be generally fabricated on the basis of the supplied layout drawing (Not to Scale) as shown in Annexure- A. The bidders are also to note that the supplied drawing is only a reference drawing and in no case it should be considered as the final drawing.
However, the successful bidder shall have to make their own detailed lay out drawing, P&I drawing etc. and the same shall have to be submitted within 4 weeks from the date receipt of formal order for OIL's approval prior to starting actual fabrication of the unit.

b. All the items of the Steam Generator detailed at para 3.0 to 3.5 above are to be installed on suitable individual skids of preferably on a single skid and the skid(s) is to be mounted on the truck platform through bolts extended up to the underneath cross members of the platform as well as chassis, as applicable. Mounting of the skid(s) either by the bolts or welding to the platform sheet (floor sheet) it should be avoided to the extent possible.

c. The skid(s) is to be covered with suitable chequered plate flooring at areas where people will generally stand to operate different items of the steam generator unit.

d. Positioning of different items of steam generator unit should be such that load is evenly distributed on the truck and does not create any problem in operating the truck as already mentioned at para. 4.1(c) above.

e. A suitable all steel construction weatherproof housing is to be constructed on the platform. Vertical posts of the housing structure are to be welded to the peripheral channels of platform through horizontal members and/or underneath cross members of platform. Welding of posts directly to the peripheral channels/floor sheet or welding of the horizontal members to the floor sheet itself should be avoided.

The housing is to be constructed as per following specifications –
i. Structure – All welded MS structure made out of square tubing of adequate size (min 5.00 cm sides).
ii. Paneling – Aluminium internal and external paneling of thickness not less than 18 gauges.
iii. Height – Not more than 2200 mm from truck platform. Overall height of the complete MSG unit including chimney shall not be more than 3400 mm from ground.
iv. Width & length – As per size of the truck platform (to cover the complete platform).
v. Doors – 1 (One) full height 2 (two) panel door at rear of the housing (width approx. 600 mm less than the cabin width) at rear of the housing.
2 (two) full height 2 (two) panel doors of minimum 1500 mm width on either sides of the housing. Positioning of the side doors as per convenience/easy access. All doors shall be provided with strong hinges and locking provisions from inside & outside.

vi. Windows – Minimum 4 (four) nos. windows of size preferably not less than 1.50 m x 0.75 m on sides of the housing with lockable sliding toughen glasses and aluminium frame.
vii. Ventilation – For proper ventilation the housing shall be fitted with two nos. of suitable exhaust fans on opposite walls.
viii. Insulations – Glass wool packing inside all walls and doors to protect personnel from heat.
ix. Waterproofing – Suitable sealant/gasket shall be used to arrest water leakage through panel joints etc.
x. Illumination – Adequate number of lights inside the housing for proper illumination. While at least one number light is to be connected to truck electrical system, power sources for the rest will be from the steam generator circuit.
In addition, two searchlights connected to truck's electrical system (switches inside the driver's cabin) shall be provided at rear top corners of the housing.
Painting – Two coats of primer followed by two coats of paints of following shades.
Exterior – Caterpillar Yellow or Golden yellow.
Interior – Light shade.
xi. Others fitments/accessories –
a. Adequate fire fighting equipment (e.g. fire extinguishers) inside the housing with suitable mounting arrangements at suitable locations.
b. Suitable foldable ladder/steps of sufficient width below each door.
c. 01 (one) no fixed type ladder at rear of the housing for climbing to housing's roof top.
d. Suitable walkway on top of housing's roof to avoid damage to roof structure/panelling.
e. Roof of the housing shall be made slanting towards sides to avoid water accumulation.
f. Suitable ventilations with fixed cover on roof (Jack-roof type) and with folding cover on wall near the engine for easy escape of hot air shall be provided. Additionally, two numbers exhaust fans shall be provided inside the MSG cabin for proper ventilation.

6.0 **SPARES**:
a) **COMMISSIONING SPARES**: The supplier has to supply all the spare parts required for initial commissioning of the unit.

b) **OPERATIONAL CRITICAL SPARES**: Supplier shall supply the following operational critical spares along with the supply of the EACH UNIT:
i. 1 ½" Globe type valve – 2 nos.
ii. 1" global type valve – 3 nos.
iii. Fuel pump (Suntec/Danfoss or equivalent) – 1 no.
iv. Water pump – 1 no.
v. 1 ½" non-return valve – 2 nos.
vi. Ignition transformer – 1 no.
vii. Spray nozzle – 1 no.
viii. Safety valve – 1 no.
ix. Steam coil – 1 no.
x. Blower – 1 no.
xi. Alternator – 1 no.
xii. Ignition Electrodes 3/8" – 1 no.
xiii. ½" Non return valve – 1 no.
xiv. 1" Flange type globe valve – 3 nos.
xv. 1" Check valve – 2 nos.
xvi. 1 ½" Flange check valve – 1 no.
xvii. 1 ½" Flange type Globe valve - 2 nos.
xviii. Contactors – 1 set.
xix. Overload relays – 1 set.
xx. Fuses – 1 set.
xxi. Lamps – 1 set.
xxii. A set of instrumentation spares comprising field switch/ instruments, solenoid valve, flame sensor, programmable controller & card, power supply etc.

c) To provide Two (02) sets of tool box of reputed make.
d) Additional hammer union: Qty: 3 nos; Reducer : 1 ½" inch to 1" –Qty-2 nos; NRV 2 " Qty: 2 nos, ; Reducer : 1 ½" inch to 1/2" –Qty-2 nos; Tee, ½" : 4 nos; Socket, 1 ½" : 3 nos. All these items will be of IBR quality.

NOTE:
i) All spares in specified quantity as indicated above shall be supplied along with each unit.

ii) Specific description, part nos., Make etc. and Unit price of each and every item shall clearly be indicated in the bid.

iii) Bidder shall also quote separately for any additional spares with similar details as felt necessary for 2 (two) years trouble free operation & maintenance. However, cost of the spares will not be considered for bid evaluation.

d) **RECOMMENDED SPARES FOR TWO YEARS**: The bidder is to furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc., throughout the life of the equipment complete with price of each item. Annual consumption of each spare should be furnished. The bidder should also provide detailed spare list of all the items including bought out items in the operation and maintenance manuals. The list
should include a spare parts list along with OEM part numbers, make & model of the equipment and contract postal address of OEM for all items of the whole unit. The price quoted for recommended spares will not be taken into account for bid evaluation.
e) The bidders must submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the certified date of completion / successful field commissioning of the unit.

7.0 DOCUMENTATION:

i) The following documents are to be submitted along with the bid:

a) Preliminary P & I diagram along with bill of equipment.
b) Instrumentation schematic diagram and interlock control circuit diagram.
c) General layout diagram showing dimensions of various components and the unit as a whole.
d) Details of weight/load distribution on the truck chassis.
e) Detailed calculation for sizing of all equipment.
f) Relevant technical catalogue/manuals of each component like water pump, fuel pump, blower, diesel engine, coil tube, alternator, burner system, instruments & control system etc. Detailed specification of each component should be provided.
g) Electrical control circuit diagram and layout diagram.
h) Test certificates including copy of CPRI test certificate for type test of the electrical panels.
i) Bill of materials for all equipment.

ii) The following documents are to be submitted by the successful bidder within 4 weeks from the receipt of the formal order for OIL's approval.
Only after receiving approval from OIL, fabrication of the MSG unit shall start.

a) Detailed engineering drawing showing layout of all equipment, load distribution, rear overhang, equipment mounting details, P&I drawing, electrical circuit diagram, panel wiring diagram, details (including make & model no) of all equipment along with quality assurance plan.

Note: During detailed designing of the unit special emphasis shall be given to the issue of ease of accessibility, servicing/maintenance and removability of individual equipment while maintaining a reasonable compactness of the unit as a whole.

b) Detailed calculation for sizing of all equipment.
c) Loop diagram and lop details.
d) PLC hardware and software.
e) Logic details of startup, sequence, interlock, safety shutdown, alarm, control & monitoring.
f) Ladder programs development for startup, sequence, interlock, safety shutdown, alarm, control & monitoring.
g) Emergency & Shutdown logic.
h) Power and control circuit diagrams of generator control panel, MCC and burner control system.
i) Details of cables, luminaries and other accessories.
iii) The following documents are to be submitted prior to dispatch of the equipment. The supplier is to note that only after scrutiny of the following documents and obtaining categorical approval, the equipment shall be dispatched from works:
A) 5 sets of bounded Operation and maintenance manual (additionally one copy in a CD) covering all the equipment including the truck unit. The manuals shall contain details like make, model, part number etc. of all installed equipment including bought out items with contact postal address of the supplier / OEM and a detailed spares list. However, to reduce the size of the manual, the manual may be separated into following volumes
• Manual for truck unit.
• Manual for MSG unit with control panel and its related ancillaries like pumps, blowers etc. The manual shall contain the detailed P&I diagram, panel wiring diagram, electrical circuit diagram etc.
• Manual for alternators, Motors and related panels.
• Operation & maintenance manual and illustrated spare parts catalogue for the prime mover (pilot engine).
• Manual for Instrumentation and control system including recommended spare parts list.

However, one copy of the manual shall be provided as master copy containing all the details in the same volume.

b) Necessary certificate/documents from competent Government authority to obtain permission from IBR, Rajasthan for operating the boiler in OIL's operational area.

c) Engine emission certificates for truck engine as well as MSG prime mover.
d) Temporary registration, Insurance, Road tax, Sale letter in Form 21 & 22 (in originals) etc. of the truck as applicable, in the name of M/s OIL INDIA LTD, Rajasthan required under Indian MV Act for onward registration of the unit in Rajasthan, India.
e) Test certificates including copy of CPRI test certificate for type of the electrical panels.
f) License copy of software for control &instrumentation system if any.

8.0 DEVIATIONS FROM THE SPECIFICATIONS:

The bidder shall enclose comprehensive list of intended deviations from the technical specifications, of any clearly highlighting the reasons thereof, along with the bid. If no deviations from the Technical specifications are intended, the same shall be confirmed in the offer. But OIL reserves the right for acceptance or rejection of the deviation.

9.0 BID SUBMISSION & DOCUMENTATIONS:

Bidder's response to all NIT stipulations should clearly be defined maintaining the same sequence as in the NIT. Bidder shall furnish specific details / specifications of all major

components, systems with Make & Model etc. Submission of technical leaflet/catalogue alone is not sufficient.
General Response like – 'As per NIT specifications / Technical leaflet' 'Noted' etc, or in any similar fashion is not encouraged. Quoting only the NIT stipulation without any confirmation of acceptance of the same and/or without any confirmation of offering the same is also not acceptable.

10.0 INSPECTION CUM ACCEPTANCE

10.1 Third Party inspection of the unit is to be carried out for all the component of the unit by OIL approved TPI agency (viz M/s Lloyds, M/s Bureau Veritas, M/s IRS, M/s Rites, M/s DNV or M/s Tuboscope Vetco only). Scope of 3rd party inspection:
(i) Witness the manufacturing and assembly
(ii) Witness the functional and performance tests
(iii) Review of inspection procedure
(iv) Review of tests and documents related to all pressure holding equipment
(v) Any other requirement of the inspection agency to satisfy of the equipment as per applicable standards.

10.2 PRE-SHIPMENT INSPECTION:

Pre shipment inspection shall be carried out by OIL (by representative of user department and representatives of state statutory bodies (state boiler authority as per IBR 1950)) at manufacturing site after accomplishment of Third Party Inspection (TPI). The supplier shall inform OIL at least 2 (two) month ahead for such inspection to enable OIL to send its inspectors. The supplier has to arrange for inspection of the units by inspecting team including the statutory bodies (state boiler authority as per IBR 1950) at manufacturing site (In case of foreign Bidders). OIL will bear the expenses towards traveling and accommodation etc. of the OIL's inspection team. However, the inspection at manufacturing site by the statutory body (as per IBR 1950) and approval from the same will be the sole responsibility of the bidder. The expenses towards the travelling and accommodation of the representative form statutory body (as per IBR 1950) shall be borne by the bidder. Bidder has to quote the same accordingly in the inspection and commissioning charges. The Inspection cum Acceptance process would include the following minimum steps/tasks but not limited to -
a. Physical verification / inspection of all the items / fittings / accessories including all Parts Catalogue, Maintenance & Service Manuals, Final Chassis Built Up/Vehicle Content Record documents, etc. and actual loading on axles.
The supplier shall arrange driver/operator, weighing facility and any other infrastructure during the process of inspection as and when required.
b. Operational testing of the carrier.
c. Supplier shall have to take note of any minor modification/s for operational requirement suggested by the inspector and comply with the same at no extra cost.
d. The inspection report shall be prepared at the end of the inspection and jointly signed by both the parties.

11.0 The supplier shall have to provide training to OIL personnel –
11.1 During the pre-dispatch inspection visit of OIL's engineer the supplier shall arrange comprehensive training at their manufacturing plant/works for a period of minimum 02 (Two) weeks on Operation & Maintenance, Troubleshooting and Working Principle of followings system/items used in the unit amongst other relevant subjects –
i) Engine and its Electronic Controller System.
ii) Transmission, Transfer Case and their control systems.
iii) Brake & ABS - including their electronic control system.
iv) Power assisted steering system including hydraulic pump and gearbox.
v) Pneumatic system for brake, transmission, PTO shifters including different valves.
vii) Hydraulic system
viii)Electrical and Instrumentation Control Panel

ix) MSG operation & trouble shooting

11.2 During installation and commissioning of the unit, the commissioning engineer shall have to provide field training as well as class room training for a period of minimum 1 (one) week to OIL's Engineer & two operators on Operation, Maintenance, troubleshooting, Working Principle and repair/ replacement of different equipment.
Bidders shall quote their training charges separately for evaluation purposes. The charges shall be shown in Commercial bid only.

12.0 INSTALLATION & COMMISSIONING:

12.1 The unit shall be commissioned at Baghewala, Rajasthan, India with 3 (three) successful field jobs as assigned after arrival of the Supplier's Commissioning Engineer within a period of 03 (three) weeks' time.
12.2 The successful bidder shall quote for commissioning charges which shall include the to and fro charges, food & lodging and daily charges of the personnel. OIL shall provide local transportation to the commissioning personnel.
12.3 The commissioning engineer shall be available at site within fifteen (15) days of the intimation given by OIL for commissioning the unit.
12.4 Bidders shall quote commissioning charges separately for evaluation purposes. The charges shall be shown in Commercial bid only.

13.0 GUARANTEE / WARRANTY:
The bidder shall offer a period of at least 1 (one) year warranty for the entire equipment supplied from the date of successful field commissioning of the entire equipment. OIL reserves the right to inspect, test and if necessary reject any part / parts after delivery at site (including incomplete manuals, catalogues, etc.) in case of any fault on the part of the supplier. It shall in no way be waived by the reason that the unit / item was previously inspected and passed by OIL as per Inspection Clause detailed elsewhere in the NIT. To keep the unit fully operational, in case of failure of any item during the warranty period, it shall be the supplier's responsibility to arrange replacement / repairing at site at their cost including customs, freight, etc. within a period of maximum 3 (three) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly.

14.0 CONFORMITY TO THE NIT SPECIFICATIONS

14.1 The bidder must confirm that they are approved Boiler Manufacturer.
14.2 The Indigenous bidder must confirm that the supplied Mobile steam Generators shall conform to the requirements, as per IBR-1950 and endorsement by respective State Boiler Authority as well as State Boiler Authority, Rajasthan, INDIA.
14.3 The foreign bidders must confirm that the supplied Mobile steam generators shall conform to the requirements as per applicable ASME code and endorsement by State Boiler Authority, Rajasthan, INDIA.
14.4 Bidder must fill the Technical check list/data sheet enclosed with the offer.
14.5 The bidder must confirm that the offered unit / goods shall be of recent manufacture.
14.6 The bids and the accompanied technical documentation must be in English language only. The bids with other than English language must have an English version.
14.7 The bidders must confirm that the offered MSG shall perform at the desired rate and parameters as mentioned in para 2.0 above.
14.8 The bidders are to confirm categorically the commissioning clause as mentioned in Para 12.0 above.
14.9 The bidders shall adhere to commitment of spares as per clause no 6.0 above. Bidder must undertake that the provision for supplying spares (including bought out items) of the equipment will be continued for next ten (10) years from the certified date of completion/successful field commissioning of the unit.

14.10 The bidder has to confirm categorically that all electrical/instrumentation equipment to be supplied, if any, shall meet the relevant International/ National standards and the installation shall be carried out as per the relevant rules, regulations and practice.

15.0 Following documents are to be submitted along with supply / unit:

a. Sale Letter, Pollution & Roadworthy Certificate (in similar format of Form 21 & 22A of Indian Motor Vehicle Act - sample copies enclosed), Engine Emission Norms Certificate, etc. as required under Indian Motor Vehicle Act for registration of the unit in the name of Oil India Limited.
b. Final Chassis built Up/Vehicle Content Record documents from chassis manufacturer.
c. Specification Sheet of unit indication all details viz Make & Model of chassis, engine, transmission etc. GVWR, Axle Capacity, Axle Loading, Wheelbase, etc., number of Axles, wheels & tyres etc., overall dimensions, turning radius, etc.
d. Certificate of Origin for the chassis in original from chassis manufacturer.
Amongst others, the certificate shall contain following information –
i. Make & Model of Chassis.
ii. Vehicle Identification Number (VIN i.e. Chassis No.)
iii. Month & Year of Manufacture of the chassis.
iv. Make & Model of Engine.
v. Serial No. of Engine.
vi. Month & Year of Manufacture of the engine.
e. ASME/IBR-1950 certificates of Boiler & Pressure parts.
f. Notwithstanding any clause mentioned elsewhere in the NIT, the invoice for the complete unit shall be submitted in 2 (two) parts separately as under -
i. Invoice for truck chassis - it shall include the cost of the truck chassis with driver's cabin only.
ii. Invoice for Mobile generator unit - it shall include cost of Boiler, all equipment, tools, accessories, etc. subsequently fitted in the original truck chassis as well as supplied, separately along with the unit.

16.0 NOTES TO THE BIDDERS:

(a) The supplier shall provide a tool kit for operation and maintenance of prime mover, boiler & instrumental panel.
(b) 'OIL' logo will have to be marked prominently on both sides of the boiler house.
(c) The bidder has to mention the names of manufacturer of all items quoted. All the items offered shall be from manufacturers as mentioned in the NIT at the relevant places.
(d) The bidder shall do the packaging of the unit in such a manner that all the equipment are easily accessible and removable for regular operation & maintenance.
(e) The supplier shall obtain permission from the IBR, Rajasthan for operating the boiler in OIL's operational area.
(f) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
(g) Oil India Purchase order no. must be engraved on the body of the item. Bidder must confirm the same categorically in their quotation.
(h) The bidder shall submit details of the previous supply of such equipment preferably in a tabular format.

13.0 General Notes :

(a) The items supplied shall be brand new, unused & of recent manufacture. Supplier shall warrant that the product supplied will be free from all defects & fault in material, workmanship & manufacture. This clause shall be valid for 12 months from the date of successful commissioning and/or 18 months from the date of despatch whichever is earlier. The defective materials, if any, rejected by OIL shall be replaced by the supplier at their own expenses on FOR Destination basis. Suppliers must confirm the same in their quotations.

(b) Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.

(c) Offers shall be complete in all respects and all the items/equipment as specified in the tender must be included in the package. Offers deemed to be incomplete shall be liable for outright rejection.

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

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

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ANNEXURE – II

BID EVALUATION CRITERIA(BEC)

The bids shall in general conform to the specifications and terms and conditions given in the tender. Bids shall be rejected in case the goods offered do not conform to the required minimum/maximum 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 will have to be particularly met by the bids, without which the same will be considered as non-responsive and be rejected.

A. TECHNICAL CRITERIA

1.0 **In case of Indigenous Original Equipment Manufacturer (OEM):**

1.1 **Bidder's Qualification**: The bidder (i.e. the Indigenous OEM) shall be an Original Equipment Manufacturer (OEM) of Mobile Steam Generator (MSG).

1.2 **Bidder's Experience**:

1.2.1 The Indigenous bidder i.e. the Original Equipment Manufacturer (OEM) of Mobile Steam Generator (MSG) shall have the experience of successful completion (including commissioning of the equipment) of at least ONE (01) no. of Horizontal Mobile Steam Generators in the last five (05) years preceding from the original bid closing date of this tender against design, fabrication, supply, installation & commissioning of Mobile Steam Generator (MSG) to any reputed E&P / Service company. The OEM shall submit copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading /Inspection Release Note/ Commissioning Report/completion certificate from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client(s) to whom the above supplies were made.

Note: Possession of an order without complete supply or partially completed order shall not be considered as previous experience of the Indigenous bidder.

1.2.2 The above clause 1.2.1 shall not be applicable to the Indigenous bidders if they have successfully supplied horizontal MSG Units to Oil India Limited (OIL) and have Proven Track Record (PTR) of continuous field operation for at least two (2) years from the date of supply. However, such bidders shall either submit copy of OIL's Purchase Order or mention the OIL's P.O. No. for reference purpose.

2.0 **In case of Foreign Original Equipment Manufacturer (OEM):**

2.1 **Bidder's Qualification**: The Foreign bidder shall be an Original Equipment Manufacturer (OEM) of Mobile Steam Generator (MSG) or Authorized Dealer of the Foreign Original Equipment Manufacturer (OEM). In case of Authorized Dealer, the authorized dealer shall submit valid authorization certificate from the Foreign OEM with necessary warranty/guarantee back-up. Any change of OEM of the offered product after submission of bid is not acceptable(except merger, takeover of the OEM company etc.) and such bid of authorized dealer/distributor shall be rejected.

2.2 **Bidder's Experience:**

2.2.1 The principal (i.e. Foreign OEM) shall have experience of manufacturing at least ONE (01) no. of Horizontal Mobile Steam Generators in the last five(05) years preceding from the original bid closing date of this tender against design, fabrication, supply,

installation & commissioning of Mobile Steam Generator (MSG) to any reputed E&P / Service company. The Foreign OEM's documentary evidence in this regard shall be provided in the form of copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading /Inspection Release Note/ Commissioning Report/completion certificate from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client(s) to whom the above supplies were made.

2.2.2 In case the bidder is an Authorised Dealer of the Foreign OEM, the authorized dealer shall have the experience of supply, installation & commissioning of at least one (01) horizontal Mobile Steam Generator Unit (MSG) manufactured by its proposed foreign OEM to any reputed E&P / Service company during the last five (05) years preceding from the bid closing date of this tender. The bidder shall submit copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading /Inspection Release Note/ Commissioning Report/completion certificate from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client to whom the above supply was made. However, the bidder's proposed foreign OEM shall fulfill the criteria mentioned in Clause No. 2.2.1 above.

B) <u>FINANCIAL CRITERIA :</u>

1.0 The bidder shall have an annual financial turnover of minimum INR 80.00 Lakh or equivalent in US Dollar during any of the preceding 03(three) financial years/ accounting year reckoned from the original bid closing date.

2.0 "**Net Worth**" of the bidder should be positive for the preceding financial/ accounting year.

3.0 Documentary evidence in the form of Audited Balance Sheet and Profit & Loss Account for the preceding 03(three) financial/accounting years should be submitted along with the technical bid.

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.

Notes:

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-A.

OR

ii) Audited Balance Sheet along with Profit & Loss account. In case of foreign bidders, self-attested/digitally signed printed published accounts are also acceptable.

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.

3.1 In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR or US$, the bidder shall have to convert the figures in equivalent INR or US$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US$.

C) COMMERCIAL 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 "Priced Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.

2.0 Bid security of INR 3,20,000/- or USD 4,900 shall be furnished as a part of the TECHNICAL BID (refer Clause Nos.9.0 & 12.0 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/RP/GLOBAL/E-01/2005 for E-procurement (ICB Tenders)). **Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration.** 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. 9.8 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/RP/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).

2.2 The Bid Security shall be valid for 210 days from the original bid closing date of tender.

3.0 Validity of the bid shall be minimum 120 days from Bid closing date. Bids with lesser validity will be straightway 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 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.

6.0 Bidders shall quote directly and not through Agents in India. Offers made by Indian Agents on behalf of their foreign principals will be rejected. Similarly offers from unsolicited bidders will be rejected.

7.0 Bids containing incorrect statement will be rejected.

8.0 No offers should be sent by E-mail or Fax. Such offers will not be accepted.

9.0 Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of twelve(12) months from the date of successful commissioning or 18 months from the date of despatch whichever is earlier against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses and no extra cost to OIL on FOR Destination basis.

10.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for one year from the date of successful commissioning. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

11.0 The Technical Bid should be submitted/uploaded along with Integrity Pact duly signed by the authorized signatory of the bidder. If any bidder refuses to sign Integrity Pact or declined to submit Integrity Pact with the offer, their bid shall be rejected straightway.

12.0 Bidders are required to submit the summary of the prices in their commercial bids as per the Price Bid Format of this tender.

D) EVALUATION OF BID :

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

I. **COMMERCIAL** :

1.0 The evaluation of bids will be done as per the Price Bid Format.

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 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.

4.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC shall prevail.

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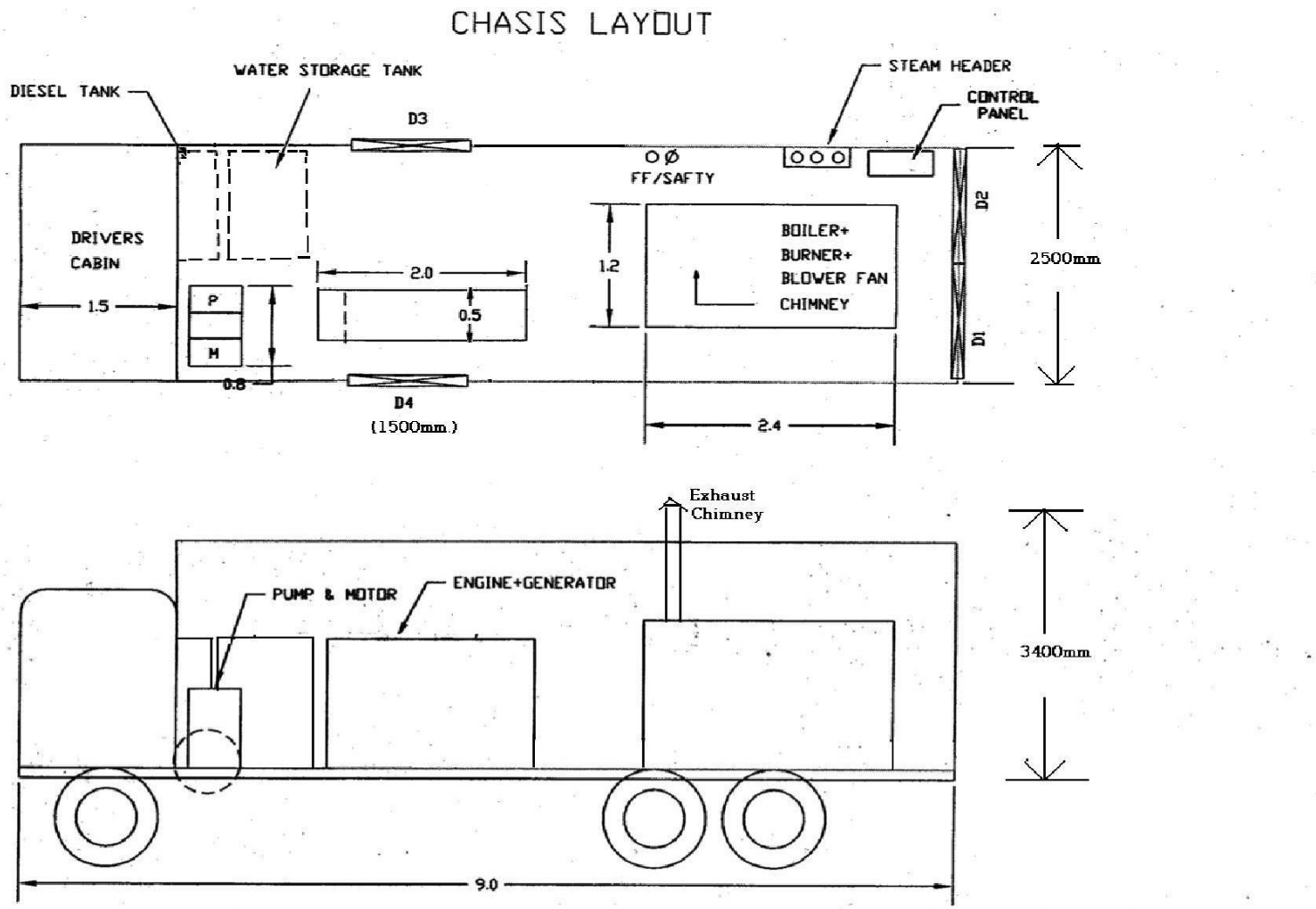

SKETCH IS ONLY FOR REPRESENTATION PURPOSE-IT IS NOT TO SCALE

FORM -21

*This is a sample copy **similar to FORM 21 of Indian Motor Vehicle Act** only. The certificate to be issued by supplier shall contain following minimum information. -*

SALE CERTIFICATE

Certified that …… (brand name of the vehicle) has been delivered by us to …… on …… (date).

Name of the buyer …… Address …… The details of the vehicles are as under -:

1. Class of vehicle …….. 2. Maker's name & address ……..

3. Chassis No. ……..

4. Engine No. ……

5. Horse power or cubic capacity …….. 6. Fuel used ……..

7. Number of cylinders é é é é é é é é é é é é é é ..
8. Month and year of manufacturing é é é é é é é é é é é é é é ..
9. Seating capacity (including driver) ……..

10. Unladen weight ……..

11. Maximum axle weight, number and description of tyres –

(a) Front axle é é é é é é é é é é é é é é ..
(b) Rear axle/axles é é é é é é é é é é é é é é ..
(c) Any other axle é é é é é é é é é é é é é é ..
12. Colour (s) of the body é é é é é é é é é é é é é é ..
13. Gross vehicle weight é é é é é é é é é é é é é é ..
14. Type of body é é é é é é é é é é é é é é ..

Date: …… Signature of the manufacturer / dealer

SAMPLE COPY OF FORM 22(A)

Following is a sample copy of**FORM 22(A) of Indian Motor Vehicle Act** only. The certificate to be issued by supplier shall contain following minimum information. –

FORM 22-A

[See Rules 47 (g), 115, 124(2), 126-A and 127(1), 127(2)] INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)

PART – I

(**TO BE ISSUED BY THE MANUFACTURER**)

Certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made thereunder, including the following mass emission norms:

Brand name of the vehicle : ……

Chassis number : ……..

Engine number/Motor number : ……..

(In case of battery operated vehicles)

Sub-rule No…of rule 115 : ……..

Emission norms :……..

[(Bharat Stage-I/II/III etc.] :……

Manufacturer

Signature of Chassis

Form 22-A, Part I shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer.

***

PART – II

(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the vehicle ……(brand name of the vehicle) bearing Chassis number …… and Engine Number ……. has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made thereunder.

Signature of body builder

Form 22-A, Part II shall be issued with the signature of the body builder duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the body builder.

***

CHECK LIST

I. TECHNICAL

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" AND ADD REMARKS, IF ANY TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMNS.

Any difference in specification elsewhere in the tender, the specification of the check list shall be treated as final.

	PART A		
	A 1.1 (DUTY CONDITIONS OF BOILER)		
Sl. No.	**PARAMETERS / REQUIREMENTS**	**BIDDER'S OFFER (To indicate details or yes/no, as applicable)**	**REMARKS, IF ANY**
1	Steam Output capacity: 2200 ±10% kg/h		
2	Max. working pressure: 160 kg/sq.cm (2275 psig)		
3	Max. Steam temperature: 175-310 Deg C.		
4	Max. Time allowed to generate steam: 3 to 5 minutes, at the rated output & pressure of 160 Kg/sq.cm from cold start.		
5	Design code of pressure parts: IBR 1950 with latest amendments/ASME		
6	Type: Fully automatic, oil fired, once through, water tube, laterally wound, force circulation, force draft, 3 pass design horizontal type.		
7	Coil tube design: Two concentric helical, closed pitch coils fabricated out of carbon steel, connected to form continuous flow passage, kept inside a shell assembly.		
8	Shell design: Double shell arrangement, preheat the combustion air between the shells along with suitable radiator for heat convection and independent of coil bundle with peephole for visual inspection.		
9	Fuel: High speed diesel		
10	Feed water quality: To specify for smooth & efficient operation of the unit.		
11	Fuel burning combustion system: a. Burner: pressure jet, direct electric spark ignition type using spark electrodes/plugs from ignition transformer Make:Monarch/Invalco/Hauck (ELSTER) etc. b. Combustion air blower: Centrifugal type of suitablecapacity belt/electric motor drive.		
12	Fuel Pump: Gear type fuel pump suitable for pumping HSD, belt or electric motor dive. Make: Sofag,Sun strand, Neel or equivalent reputed		

13	Manual HSD filling tank to provide		
14	Feed water pump: Triplex reciprocating plunger type positive displacement pump of make like SPECK , either diesel engine through belt or electric motor driven		
15	Steam Header shall have flanged ends which is to be placed at right hand side of unit.		
16	Ducting to be provided with rain head outside the boiler housing		
17	Piping should be of boiler quality duly certified with suitable insulation		
18	Steam hose: Two sets of 25 mm NB pipes of 70 Kg/sq.cm working pressure duly insulated with quick release couplings at each end.		
19	Valves: IBR quality flanged type valves at in suitable nos. & at suitable positions for easy operation		
20	Diesel Oil tank: Suitable capacity commensurate with feed water tank capacity & fuel consumption rate.		
21	Feed water tank capacity: Not less than 6000 liters		

A 1.2 :(ELECTRICAL)

A ALTERNATOR

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Rated voltage: 415V (+/-) 6% AC		
2	Rated frequency: 50 Hz (+/-) 3%, 1500 RPM		
3	Phase system: 3 phase, 4 wires		
4	Power factor: 0.8 lagging		
5	Class of insulation for stator, rotor: F/H		
6	Phase sequence: UVW		
7	Rating: Continuous		
8	Connection: Star		
9	Winding material: Copper		
10	Alternator Internal protection (enclosure) : IP 23		
11	Alternator cable terminal box protection: IP 54		
12	Excitation system: Brushless Self excited & auto regulated		
13	The AVR shall ensure that voltage dip during starting of highest size motor with other electrical loads running at rated output shall not be more than 10% of the alternator rated voltage.		
14	Mounting: Foot mounted		
15	Suitable cable termination box for 4 core, copper conductor, steel armoured PVC		

	insulated cable		
16	Alternator mounting on anti-vibration pads		
17	Alternator shall have two external grounding terminals.		
18	Alternator make: Stamford/ Kirloskar/ NGEF/Crompton Greaves/other		

B. CONTROL PANEL

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Panel construction, ingress protection		
2	Incomer breaker – MCCB min. 25 kA breaking capacity and current rating (shall be min. 25% higher than generator FLC), Microprocessor bases OL/SC/GF release. Make: Schneider/Legrand/Siemens/ABB		
3	Microprocessor based voltage monitoring relay for the alternator; make:		
4	Microprocessor based frequency monitoring relay for the alternator; make:		
5	Digital multi-function meter; make:		
6	Control wiring; make, conductor material, size of cable, FR quality		
7	Power wiring; make, conductor material, size of cable, FR quality		
8	Control system (PLC/SLC based) and make		

C. ELECTRICAL MOTORS:

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Voltage: 415V (+/-) 6% AC		
2	Frequency : 50 Hz (+/-) 3%		
3	Duty: S-1 (Continuous)		
4	Enclosure: Totally enclosed Fan cooled (TEFC)		
5	Class of insulation: F but limited to temperature rise of B class insulation		
6	Degree of protection: IP: 55		
7	Earth terminals		
8	Standard: Motor shall conform to IS: 325		
9	Motor make: Kirloskar/Crompton Greaves/Bharat Bijlee/ABB/ equivalent		

D. MOTOR CONTROL CENTRE:

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Details of incomer MCCB: Rated current, voltage, short circuit rating, microprocessor controlled trip settings		
2	Make of MCCB: Schneider/Siemens/ ABB/ Legrand/ Indo-Asian		
3	Busbar capacity; material; panel construction		
4	Earth leakage relay with core balance current transformer; settings		
5	Ammeter details		
6	Voltmeter details		
7	Outgoing starter panel details: Incomer MCCB details, starter contactor, thermal overload relay, timer details		
8	Outgoing feeder to instrumentation panel: details		

A 1.3: TECHNICAL (<u>TRUCK CHASSIS)</u>

Srl. No.	**PARAMETERS / REQUIREMENTS**		**BIDDER'S OFFER (To indicate details or yes/no, as applicable)**	**REMARKS, IF ANY**
1	Make & Model of Truck Chassis			
2	Max. Permissible Gross Vehicle Weight (GVWR)			
3	Drive- 6x4			
4	Cowl-Full Forward Control			
5	Ground Clearance			
6	Laden Weight (Total weight of the unit)			
7	Engine	a) Make & Model		
		b) Max. Output Power		
		c) Max. Output Torque		
		d) Naturally Aspirated or Turbo Charged		
		e) Emission Norms		
8	Transmission			
	a	Make & Model		
	b	No. of gears		
9	Make, Model & Type of Steering system			
10	Wheelbase			
11	Overall Dimensions (Width, Height & Length) of complete unit			
12	Make, Model & Type of Front Suspension			

13	Make, Model & Type of Rear Suspension			
14	Rear Overhang			
15	Minimum Turning Radius			
16	Axle Capacity	a Front		
		b Rear		
17	Actualloading on axles.	a Front		
		b Rear		
18	Type, Size of Wheel & Tyre	a Front		
		b Rear		
19	Type of Service Brake (S-cam or not)			
20	Type of Wheel Brake Servos (screw type manual release or not)	a Front		
		b Rear		
21	Fuel Tank capacity			
22	Seating Capacity in the Driver's cabin			
23	Reversing Alarm with Blinker Lights			
24	Electrical fittings/equipment suitable for hazardous oilfield area.			
25	Speedometer/Odometer in Metric (KM) calibration.			
26	Towing Hooks at Front & Rear of truck.			
27	Electrical System: 12 volt or 24 volt			
28	Make of Starter, Alternator, etc. of engine			
29	One additional lockable toolbox of size min. 1.00 m x 0.50 m x 0.50 m.			

A1.4: PRIME MOVER ENGINE OF GENSET OF MSG

Sl. No.	**PARAMETERS / REQUIREMENTS**	**BIDDER'S OFFER (To indicate details or yes/no, as applicable)**	**REMARKS, IF ANY**
1	Make & Model of Engine		
2	Gross and Net Horsepower developed		
3	Engine should be air cooled, vertical, naturally aspirated, inline diesel engine of continuous rating and conforming to latest EURO-IV emission norms.		
4	Engine should be with an overload capacity of 10%		

	for a period not exceeding one Hour in any 12 hours running when running at 1500 R.P.M.		
5	Engine shall conform to specifications IS:10000/BS:5514		
6	Overall Dimensions (Width, Height & Length) and weight of engine		
7	The Governing is to be in accordance with Class A-2 specifications to IS: 10000/BS: 5514.		
8	Engine make: KIRLOSKAR/ RUSTON / CUMMINS/ CATERPILLAR / GREAVES / Other		
9	Engine should have 12 V electrical self-starter with suitable maintenance free battery and charging alternator		
10	Make and model of Self-starter and battery charging alternator		
11	It should have drive pulley for power take off		
12	A suitably selected flexible coupling should be incorporated to transfer power from the engine to the Alternator		
13	Air blower, fuel pump, feed water pump and Charging alternator of the Mobile Steam Generator shall be direct belt driven and belt guards to be provided over them.		
14	Suitable spark arrestor with silencer along with necessary piping covered with exhaust lagging shall be provided at the engine exhaust and it shall be suitably insulated		
15	The engine shall have minimum 20% reserve HP.		
16	The engine shall be firmly anchored to the skid, using vibration isolator of reputed make like DUNLOP.		
17	Alternative arrangement shall be provided for manual starting of the engine.		

18	Emergency/Safety engine shutdown system in case of Low lubricating oil pressure &over speed should be provided.		
19	The Fuel System should comprise of Mechanical Governor, Fuel Injectors, Fuel Pump, Fuel Filter Assembly, Fuel lines and Fuel Tank having storage capacity to meet the Fuel requirements of 12 hours of full load operations.		
20	Fuel consumption at rated power at 110%, 75%, and 50% of rated load to be provided.		
21	The engine with all other accessories, tanks, etc. shall be installed on a suitable skid with removable type steel protective frame cage equipped with lifting lugs for lifting of the complete unit.		
22	The skid shall have provision to facilitate installation of the same on a truck platform.		
23	The Lubricating System should comprise of Gear driven lubricating Oil Pump, Lubricating Oil Filter with a replaceable Filter Element, Lubricating Oil Cooler, Lubricating Oil Pan, Oil level dipstick and Crankcase breather.		
24	Type of Engine control system		
25	The engine shall be complete with Digital / manual Tachometer & Hour meter in addition to all standard Lub oil pressure gauges & meters, starting switch, ignition switch , ammeter etc.		
26	Engine to be supplied with standard painting and it should have SAE standard rotation		
27	Whether all the spare parts required for initial commissioning of the unit will be supplied.		
28	The bidders must submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including		

	bought out items) for a minimum period of 10 (ten) years from the certified date of completion / successful field commissioning of the unit.		

A 1.5: MSG CONTROL PANEL AND INSTRUMENTATION[A] Controller & Control Panel

Sl.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS (IF ANY)
1	Control Panel Make & Model		
2	Controller to be used (PLC/SLC)		
3	Make & Model of the Controller		
4	Audio-visual Alarm (Yes/No)		
5	Manual Reset (Yes/No)		
6	Automatic safety shutdown devices (YES/NO)		
7	Annunciation system with fuel cut-off (YES/NO)		
8	Emergency shutdown system (YES/NO)		
9	Ignition Transformer operating power 230VAC, 50Hz?		
10	Steam Temperature Controller (YES/NO)		
11	Under voltage Indication (YES/NO)		
12	Control Panel is offered with anti-vibration system (YES/NO)		
13	Control Panel Rating IP-65 (YES/NO)		
14	Proper Illumination inside the panel (YES/NO)		
15	Laptop with programmable software/handheld programmer for interfacing with PLC/SLC(YES/NO)		

[B] Shutdown devices for the following conditions along with Audio-visual alarms (✓)

Conditions	Shutdown	Audio-visual Alarm
i. Flame failure		
ii. Steam pressure high		
iii. Steam temperature high		
iv. Low feed water pressure		
v. Low fuel oil pressure		
vi. Blow down valve open		
vii. Low air pressure		

[C] Panel mounted indicating Meter, lamps & Push Buttons & Selector switches (✓)

Indicating Lamps		
a)	230 V AC ON.	
b)	Safety Lockout Internal.	
c)	Start	
d)	Flame ON	
e)	Water pump on	
f)	Water pump off	
g)	Water pump trip	
h)	Fuel Pump ON.	
i)	Fuel Pump Off	
j)	Fuel Pump trip	
k)	Air blower ON	
i)	Air blower Off	
m)	Air blower trip	
n)	Steam Temperature high	
o)	Steam pressure high	
p)	Low steam pressure	
q)	Low air pressure	
r)	Low fuel pressure	
s)	Low fuel oil level	
t)	Low feed water level	
u)	Blow down valve open status	

Push Buttons:		
a)	Start push button	
b)	Stop push button	
c)	Alarm Test push button	

d)	Alarms accept push button	
e)	Alarm reset PB	
f)	Start PB for water pump	
g)	Stop PB for water pump	
h)	Start PB for fuel pump	
i)	Stop PB for fuel pump	
j)	Start PB for air blower	
k)	Stop PB for air blower	
Selector Switches :		
m)	Auto/Manual water pump selector switch	
n)	Auto/Manual fuel pump selector switch	
o)	Auto/Manual air blower selector switch	
p)	230 V power ON/OFF switch	
Indicating Meter		
r)	Steam temperature. (Analog type input, preferably 4-20 ma)	

[D] Field mounted instruments: Analog type (✓)

a)	Steam pressure gauge	
b)	Feed water pressure gauge.	
c)	Indicating thermostat or temperature switch for steam temperature, with a set point for high temperature (superheat alarm)	
d)	Steam pressure switch for both high & low	
e)	Air pressure switch	
f)	Pressure switch for fuel oil	
g)	Pressure switch for feed water	
h)	Level switch for fuel oil level	
i)	Level switch for feed water level	
j)	Limit switch for blow down valve	
k)	Alarm rest, engine start and main switch	
l)	Level glass gauge for Fuel Tank	

[E] For Diesel Engine (✓)

a)	Tachometer	
b)	Lube oil pressure indicator	
c)	Temperature indicator	

PART B. DOCUMENTATIONS

Srl. No.	Descriptions	Document enclosed (Yes / No or Confirm to supply along with the units	Remarks, if any
1.	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, suspension, axle, steering, wheel & rim, brake, etc.		
2.	Detailed dimensional layout drawing illustrating Driver's Cabin, Rear Cabin and all major items/ components etc.		
3.	List of tools that shall be supplied under Tool Kit for general maintenance of the truck.		
4	Sale Letter, Pollution & Roadworthy Certificate (in similar format of Form 21 & 22A of Indian Motor Vehicle Act - sample copies enclosed), Engine Emission Norms Certificate, etc. as required under Indian Motor Vehicle Act for registration of the unit in the name of **Oil India Limited**		
5	All necessary IBR-1950/ASME certifications for the IBR items of MSG unit & the IBR/ASME testing reports wherever applicable.		
6	Literature/leaflets with detailed specifications of all items fitted in the Boilers, mountings and accessories of the MSG Unit		

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ANNEXURE III

(B) COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND RETURNED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

Sl#	REQUIREMENT	COMPLIANCE
1.0	Whether bid submitted under Single Stage Two Bid System?	Yes / No
2.0	Whether quoted as manufacturer?	Yes / No
2.1	Whether quoted as OEM Dealer / Distributor. To Specify-	Yes / No
2.2	If quoted as OEM Dealer / Distributor, (a) Whether submitted valid and proper authorization letter from manufacturer confirming that bidder is their authorized Dealer / Distributor for the product offered ?	Yes / No
	(b) Whether manufacturer's back-up Warranty/Guarantee certificate submitted?	Yes / No
3.0	Whether ORIGINAL Bid Bond (not copy of Bid Bond) as per Revised Format(Annexure VII Revised) Sent separately? If YES, provide details	
	(a) Amount :	
	(b) Name of issuing Bank :	
	(c) Validity of Bid Bond :	
4.0	Whether offered firm prices ?	Yes / No
4.1	Whether quoted offer validity of 120 days from the bid closing date of tender?	Yes / No
4.2	Whether quoted a firm delivery period?	Yes / No
4.3	Whether agreed to the NIT Warranty clause?	Yes / No
4.4	Whether confirmed acceptance to tender Payment Term?	Yes / No
4.5	Whether quoted rates inclusive Third Party Inspection charges ?	Yes / No
5.0	Whether confirmed to submit PBG as asked for in NIT?	Yes / No
5.1	Whether agreed to submit PBG within 30 days of placement of order/issue of LOA?	Yes / No
6.0	Whether submitted Price Bid as per Price Bid Format of the tender	Yes / No
7.0	Whether quoted as per NIT (without any deviations)?	Yes / No
7.1	Whether quoted any deviation?	Yes / No
7.2	Whether deviation separately highlighted?	Yes / No

7.3	Whether indicated the country of origin for the items quoted?	Yes / No
7.4	Whether technical literature / catalogue enclosed?	Yes / No
7.5	Whether weight & volume of items offered indicated?	Yes / No
8.0	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	Yes / No
8.1	For Foreign Bidders – Whether port of shipment indicated. To specify:	Yes / No
8.2	For Foreign Bidders only - Whether indicated ocean freight up to Kolkata port (Excluding marine insurance) ?	Yes / No
8.3	Whether Indian Agent applicable ?	Yes / No
	If YES, whether following details of Indian Agent provided?	
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	
	(c) Whether agency commission included in quoted material value?	
9.0	For Indian Bidders – Whether indicated the place from where the goods will be dispatched. To specify :	Yes / No
9.1	For Indian Bidders – Whether road transportation charges up to Hamira, Rajasthan quoted?	Yes / No
9.2	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	Yes / No
9.3	For Indian Bidders only - Whether indicated import content in the offer?	Yes / No
9.4	For Indian Bidders only - Whether offered Deemed Export prices?	Yes / No
9.5	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted?	Yes / No
9.0	Whether all BEC clauses accepted ?	Yes / No
10.0	Whether Integrity Pact with digital signature uploaded?	Yes / No
10.1	Whether all the clauses in the Integrity Pact have been accepted?	Yes / No

Signature _____
Name _____
Designation _____

****

PRICE BID FORMAT

(A) FOR FOREIGN BIDDER :

Srl. No.	DESCRIPTION	Qty.	Unit	Unit Rate (currency)	Total Value (currency)
1	(a) COST OF TRUCK MOUNTED HORIZONTAL MOBILE STEAM GENERATOR (MSG) UNIT INCLUDING THIRD PARTY INSPECTION (TPI)	01	No.		
	(b) Cost of Commissioning Spares	01	Set		
	(c) Cost of Operationally Critical Spares	01	Set		
	Total Material Cost				
2	Packing & FOB Charges				
3	FOB Value (1+2)				
4	Ocean Freight Charges up to Kolkata, India				
5	Insurance Charges @ 0.5 % of Total FOB Value vide (3) above				
6	Banking Charges @ 1 % of Total FOB Value vide (3) above in case of payment through Letter of Credit. If confirmed L/C at buyer's account is required, 1.5% of Total FOB Value will be loaded)				
7	CIF Value (3+4+5+6)				
8	Landing Charges 1% on (7)				
9	CIF Landed Value (7+8)				
10	Basic Custom Duty on (9)				
11	CIF +CD Landed Value (9+10)				
12	IGST on (11)				
13	Compensatory Cess on 11, If any				
14	CIF+CD+GST Landed Value (11+12+13)				
15	**Installation & Commissioning charges**				
16	GST @ 12% on (15)				
17	**Total Value (14 + 15 + 16)**				
18	**Total value in words**				
19	Gross Weight of total consignment				
20	Gross Volume of total consignment				
21	**Cost of Recommended Spares for Two(02) Years**				

(B) FOR INDIGENOUS BIDDER :

Srl. No.	DESCRIPTION	Qty.	Unit	Rate (currency)	Total (currency)
1.	(a) COST OF TRUCK MOUNTED HORIZONTAL MOBILE STEAM GENERATOR (MSG) UNIT INCLUDING THIRD PARTY INSPECTION (TPI)	01	No.		
	(b) Cost of Commissioning Spares	01	Set		
	(c) Cost of Operationally Critical Spares	01	Set		
	Total Material Cost				
2	Packing & Forwarding charges				
3	Total Ex works Value (1+2)				
4	GST on (3)				
5	Compensatory Cess, If any				
6	Total FOR Despatching Station· value (3+4+5)				
7	**Installation & Commissioning Charges**				
8	GST @ 12% on (7)				
9	Total FOR Despatching Station value including Instln. & Comng.(6+7+8)				
10	Inland freight Charges up to Hamira Godown, Jaisalmer				
11	GST on (10)				
12	Insurance Charges @ 0.5 % of (3) inclusive of GST				
13	**Total FOR Hamira, Jaisalmer Value including Instln. & Comng. (9+10+11+12)**				
14	Total value in words (13)				
15	Gross Weight of total consignment				
16	Gross Volume of total consignment				
21	**Cost of Recommended Spares for Two(02) Years**				

Comparison of Offers:

1.0 When only foreign bidders are involved:

Comparison will be done on Total value vide Sl. No. 17.

2.0 When both foreign & Domestic bidders are involved:

Comparison will be done on total value vide Sl. No. 17 for foreign bidder vis-a-vis total value vide Sl. No. 9 for domestic bidder.

3.0 When only domestic bidders are involved:

Comparison will be done on Total value vide Sl. no 13 of Domestic bidder.

Note:

1. Domestic bidders must quote inland freight charges up to **Hamira Store, Jaisalmer(Rajasthan).** In case bidder fail to quote inland freight charges, highest freight quoted by domestic bidder (considering prorated distance) against this tender shall be loaded to their offer for comparison purpose.

2. The items covered under this enquiry shall be used by OIL in the PEL/ML areas issued/renewed after 01/04/99 and hence, applicable Customs Duty for import of goods shall be ZERO. However, GST@ %5 shall be applicable. GST@ 5% shall be applicable for Indigenous bidders also under deemed export benefit.

3. Other clauses shall be applicable as per **MM-RP-GLOBAL-E-01-2005** and Goods & Service Tax clauses as per GST CLAUSE (ANNEX.-GST) uploaded in Tender.

6. If any of the Clauses of this tender document contradict the Clauses of the **booklet MM-RP-GLOBAL-E-01-2005** for E-procurement (ICB Tenders) elsewhere; those in this tender document shall prevail.

****

ANNEXURE – A

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

[TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETIER HEAD]

TO WHOM 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.

YEAR	TURN OVER In INR Crores / US$ Million*	NET WORTH In INR Crores / US $ Million *

* Rate of Conversion (if used any): USD 1.00 = INR. ..... .

Place :
Date:

Seal:

Membership No ..

Registration Code:

Signature :

[* Applicable only for GLOBAL tenders.]

***

GOODS AND SERVICES TAX

Provision of Clauses towards taxes and duties of document no MM/RP/GLOBAL/E-01/2005(Revised in May 2016) stands deleted and replaced with the following:

**.1 "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

**.2 The quoted price shall be deemed to be inclusive of all taxes and duties except "Goods and Services Tax" (hereinafter called GST) (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation Cess if applicable).

**.3 Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL (Oil India Limited)/client. In the event that the contractor / vendor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules thereunder, OIL/client shall not be liable to make any payment on account of GST against such invoice.

**.4 GST shall be paid against receipt of tax invoice and proof of payment of GST to government. In case of non-receipt of tax invoice or non-payment of GST by the contractor/vendor, OIL shall withhold the payment of GST.

**.5 GST payable under reverse charge for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL/client.

**.6 Where OIL/client has the obligation to discharge GST liability under reverse charge mechanism and OIL/client has paid or is /liable to pay GST to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL/client for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by OIL/client to Contractor / Supplier.

**.7 The Supplier shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the Rules & Regulations, as applicable from time to time. In particular, if any tax credit, refund or other benefit is denied or delayed to OIL/project owner due to any non-compliance / delayed compliance by the Supplier under the Goods & Service Tax Act (such as failure to upload the details of the sale on the GSTN portal, failure to pay GST to the Government) or due to non-furnishing or furnishing of incorrect or incomplete documents by the Supplier, the Supplier shall be liable to reimburse OIL/project owner for all such losses and other consequences including, but not limited to the tax loss, interest and penalty.

**.8 Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the GST charged by the Contractor / Vendor is denied by the tax authorities to OIL/client for reasons attributable to Contractor / Vendor, OIL/client shall be entitled to recover such amount from the Contractor / Vendor by way of adjustment from the next invoice. In addition to the amount of GST, OIL/client shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL/project owner.

**.9 TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.

**.10 The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/ concessions available under tax laws.

**.11 The contractor will be liable to ensure to have registered with the respective tax authorities and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.

**.12 In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

**.13 OIL/client will prefer to deal with registered supplier of goods/ services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL/client is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

****.14 GST (GOODS & SERVICE TAX) (TRANSPORTATION CHARGES, SUPERVISION / TRAINING, SITE WORK):**

The quoted Prices towards Transportation, Supervision, Training, Site Work, AMC shall be inclusive of all taxes & duties except Goods & Service Tax (GST).

Goods & Service Tax (GST) as billed by the Supplier shall be payable at actuals by Owner subject to Contractor furnishing proper tax invoice issued in accordance with Goods & Service Tax (GST) rules to enable Owner to take input tax credit as per Govt. Rules 2004 on Goods & Service Tax (GST) paid.

Goods & Service Tax (GST) shall not be payable, if the requirements as specified above are not fulfilled by the Supplier. In case of non-receipt of above, Owner shall withhold the payment of Goods & Service Tax (GST).

In case of Foreign Bidders, where foreign bidder does not have permanent establishment in India, for supervision/training services by foreign supervisor at Project Site, Goods & Service Tax (GST) shall be paid by Owner to tax authorities.

****.15 Documentation requirement for GST**

The vendor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to Owner/OIL, and pass on the benefits, if any, after availing input tax credit.
Any invoice issued shall contain the following particulars-
a) Name, address and GSTIN of the supplier;
b) Serial number of the invoice;
c) Date of issue;
d) Name, address and GSTIN or UIN, if registered of the recipient;
e) Name and address of the recipient and the address of the delivery, along with the State and its code,
f) HSN code of goods or Accounting Code of services;
g) Description of goods or services;
h) Quantity in case of goods and unit or Unique Quantity Code thereof;
i) Total value of supply of goods or services or both;
j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
k) Rate of tax (IGST,CGST, SGST/ UTGST, cess);
l) Amount of tax charged in respect of taxable goods or services (IGST,CGST, SGST/ UTGST, cess);

m) Place of supply along with the name of State, in case of supply in the course of inter-state trade or commerce;
n) Address of the delivery where the same is different from the place of supply and
o) Signature or digital signature of the supplier or his authorised representative.

GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner-
a) The original copy being marked as ORIGINAL FOR RECIPIENT;
b) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
c) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. **.15 (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

****.16 GENERAL REMARKS ON TAXES & DUTIES:**

In view of GST Implementation from 1st July 2017, Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in GST. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax, E1/E2 Forms, and any other form of indirect tax except of GST mentioned in the bidding document shall be ignored.

****

Annexure-PP-LC

Provisions to be incorporated in the ITB of tenders for procurement of Goods pertaining to Oil & Gas business activities covered under Purchase preference Policy (linked with Local Content) (PP-LC)

Purchase preference policy (linked with Local Content)(PP-LC) notified vide letter no.O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoPNG.

1. In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs-Order 2012, then the bidders should categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy. If a bidder seeks free of cost tender document under the MSE policy, then it shall be considered that the bidder has sought benefit against the MSE policy and this option once exercised cannot be modified subsequently.

2. Bidders seeking Purchase preference (linked with Local Content)(PP-LC) shall be required to meet / exceed the target of Local Content (LC) of 30 %.

2.1 Such bidders shall furnish following undertaking from the manufacturer on Manufacturerôs letter head along with their techno-commercial bid. The undertaking shall become a part of the contract.

"We _____ (Name of Manufacturer) undertake that we meet the mandatory minimum Local Content (LC) requirement i.e. _____ (to be filled as notified at Enclosure I of the policy) for claiming purchase preference linked with Local Contents under the Govt. policy against under tender no. _____."

2.2 Above undertaking shall be supported by the following certificate from Statutory Auditor engaged by the bidder, on the letter head of such Statutory Auditor.

"We _____ the statutory auditor of M/s _____ (name of the bidder) hereby certify that M/s_____ (name of manufacturer) meet the mandatory Local Content requirements of the Goods and/or Services i.e. _____ (to be filled as notified at Enclosure I of the policy) quoted vide offer No._____ dated _____ against OIL's tender No._____ by M/s _____ (Name of the bidder).

Note :

a. In case of bidder(s) for whom Statutory Auditor is not required as per law required certificates shall be provided by a practicing Chartered Accountant.
b. In case the manufacturer himself is bidding then the certificate shall be submitted by the Statutory Auditors of the manufacturer who shall provide the break-up of the cost component as per Enclosure ï II of the policy documents.
c. In case of bidder is a supplier quoting on behalf of manufacturer then the certificate shall be submitted by the Statutory Auditors of the supplier who shall provide the break-up of the cost component of the manufacturer as per Enclosure ï II of the policy documents. The responsibility for the certificate provided by the statutory auditor of the supplier shall be that of the supplier.
d. In case the tender scope covers testing, installation and commissioning and any other services in respect of the supplied goods/equipments then such costs shall also be considered in LC for which the bidder shall provide certificate from the Statutory Auditors or the Chartered Accountants as the case may be.

2.3 At the bidding stage the bidder shall provide Break-up of ñLocal Componentò and ñImported Componentò in the prescribed format enclosed as Enclosure-II of the policy document and submit / uploaded(in the e-procurement portal in case of e-tender)
along with their price .

3. Eligible (techno-commercially qualified) LC bidder shall be granted a purchase preference of 10% i.e. where the evaluated price is within 10% of the evaluated lowest price of Non Local Content (NLC) bidder, other things being equal. Accordingly, purchase preference shall be granted to the eligible (techno-commercially qualified) LC bidder concerned, at the lowest valid i.e. NLC price bid.

3.1 Only those LC bidders whose bids are within 10% of the NLC L1 bid would be allowed an opportunity to match L1 bid. All the eligible LC bidder shall be asked to submit their confirmation to match their

price in sealed envelopes. Envelopes of the bidders shall be opened and award shall be made to the lowest evaluated TA/CA (Techno-Commercially Acceptable) bidder among the eligible LC bidders. In case the lowest eligible LC bidder fails to match L1 price, the next eligible LC bidder will be awarded the prescribed quantity and so on. In case none of the eligible LC bidders matches the L1 bid, the actual bidder holding L1 price will secure the order.

4. Order for supply of 50% of the tendered quantity would be awarded to the lowest techno-commercially qualified LC bidder, subject to matching with valid NLC L1 price. The remaining quantity will be awarded to L1 (i.e. NLC bidder). Prescribed 50% tendered quantity for LC bidders shall not be further sub-divided among eligible LC bidders.

4.1 However, if L1 bidder happens to be a LC bidder, the entire procurement value shall be awarded to such bidder.

4.2 When the tendered goods/services cannot be divided in the exact ratio of 50% / 50% then OIL reserves the right to award on lowest eligible PP-LC bidder for quantity not less than 50% as may be dividable.

For example
In case tendered quantity is 3 (not divisible in the ratio of 50:50), PP-LC bidder shall get order for 2 nos. only and the rest will go to L-1 (NLC bidder).

OR

(Alternate clause applicable for cases where tendered quantity cannot be divided).

4. The tendered quantity is not splitable / non-dividable / cannot be procured from multiple sources. Hence, the entire procurement value shall be awarded to the lowest techno-commercially qualified LC bidder subject to matching with valid NLC L1 rates.

5. For the purpose of this policy, all terms used vide aforesaid policy shall be governed by the definitions specified at para 2 of the policy document notified by MoPNG vide letter No. O-27011/44/2015-ONG/II/FP dated 25.04.2017.

6. The successful bidder shall be obliged to fulfill the requirements of quality and delivery time in accordance with the provisions of the Purchase order/contract.

OIL shall have the right to satisfy itself of the production capability and product quality of the manufacturer.

7.0 Determination of LC

7.1 LC shall be computed on the basis of the cost of domestic components in goods compared to the whole cost of product. The whole cost of product shall be constituted of the cost spent for the production of goods, covering direct component (material) cost, direct manpower cost, factory overhead cost and shall exclude profit, company overhead cost and taxes for the delivery of goods.

7.2 The criteria for determination of the Local Content cost shall be as follows :

a) In the case of direct component (material), based on country of origin.
b) In the case of manpower based on INR component and
c) In the case of working equipment/facility, based on the country or origin.

7.3 The calculation of LC of the combination of several kinds of goods shall be based on the ratio of the sum of the multiplication of LC of each of the goods with the acquisition price of each goods to the acquisition price of the combination of goods.

8.0 Calculation of LC and Reporting

8.1 LC shall be calculated on the basis of verifiable data. In the case of data used in the calculation of LC being not verifiable, the value of LC of the said component shall be treated as nil.

8.2 Formats for the calculation of LC of goods is given in this document.

9.0 Certification and Verification

9.1 Bidder seeking Purchase Preference under the policy, shall be obliged to verify the LC of goods as follows :

9.1.2 At bidding stage :

a) Price Break-up

(i) The bidder shall provide break-up of ñLocal Componentò and ñImported Componentò along with the price bid as per provisions under clause 2.3.

(ii) Bidder must have LC in excess of the specified requirement.

b) Undertaking by the bidder

i. The bidder shall submit undertaking along with the techno-commercial bid as per clause no.2.1, such undertaking shall become a part of the contract.

ii. Bidder shall also submit the list of items / services to be procured from Indian manufacturers / service providers.

c) Statutory Auditorôs Certificate

The Undertaking submitted by the bidder shall be support by a certificate from Statutory Auditor as per clause 2.2.

9.1.3 After Contract Award

a) In the case of procurement cases with the value less than Rs. 5 crore (Rupees Five Crore), the LC content may be calculated (self-assessment) by the supplier of goods and/or the provider of services and certified by the Director/Authorized Representative of the Company.

b) The verification of the procurement cases with the value Rupees Five Crore and above shall be carried out by a Statutory Auditor engaged by the bidder.

9.2 Each supplier shall provide the necessary Local Content documentation to the statutory auditor, which shall review and determine the local content requirements have been met and issue of local content certificate to that effect on behalf of OIL, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.

9.3 The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with invoice while maintaining the overall % of local content for the total purchase of the pro-rata local content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.

9.4 Where currency quoted by the bidder is other than Indian Rupee then the bidder claiming benefits under PP-LC shall consider exchange rate prevailing on the date of notice inviting tender (NIT) for the calculation of Local Content.

9.5 OIL shall have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

10 Sanctions

10.1 OIL shall impose sanction on bidder/manufacturers/service providers for not fulfilling LC of goods/services in accordance with the value mentioned in certificate of LC.

10.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.

10.3 If the bidder does not fulfill his obligation after the expiration of the period specified in such warning. OIL shall initiate action for blacklisting such bidder/ successful bidder.

10.4 A bidder who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.

10.5 In pursuance of the clause No.10.4 above, towards fulfillment of conditions pertaining to Local Contents in accordance with the value mentioned in the certificate of LC, the bidder shall have to submit additional Bank Guarantee (format attached at Enclosure B) equivalent to the amount of PBG.

11. Bidders should note that PP ï LC shall not be available in case of procurement of goods / services falling under the list of items reserved for exclusive purchase from Micro and Small Enterprise (MSEs) or Domestically Manufactured Electronic Products (DMEP).

***

Enclosure-B

Proforma of Bank Guarantee towards Purchase Preference – Local Content

Ref. No._____ Bank Guarantee No. _____
Dated _____

To
Oil India Limited
_____
_____
India

Dear Sirs,

1. In consideration of _____ _____ (hereinafter referred to as OIL, which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) having entered into a CONTRACT No._____ dated _____ (hereinafter called õthe CONTRACTô which expression shall include all the amendments thereto) with M/s _____ having its registered/head office at _____(hereinafter referred to as the õCONTRACTORö) which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and OIL having agreed that the CONTRACTOR shall furnish to OIL a Bank guarantee for India Rupees/US$ _____ for the faithful fulfillment of conditions pertaining to Local Content in accordance with the value mentioned in the certificate of Local Content submitted by the contractor for claiming purchase preference under the Purchase Preference Policy (linked with Local Content).

2. We (name of the bank) _____ registered under the laws of _____ having head/registered office at _____ (hereinafter referred to as õthe Bankö, which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay to OIL immediately on first demand in writing any / all money to the extent of Indian Rs./US$ (in figures) _____ (Indian Rupees/US Dollars (in words) _____) without any demur, reservation, contest or protest and/or without any reference to the CONTRACTOR. Any such demand made by OIL on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and/or any other matter or thin whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by OIL in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operating against the bank.

3. The Bank also agrees that OIL at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that OIL may have in relation to the CONTRACTORôs liabilities.

4. The Bank further agrees the OIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in OIL against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relived from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of OIL or any indulgence by OIL to the said CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of OIL under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till OIL discharges this guarantee in writing, whichever is earlier.

6. This Guarantee shall not be discharged by any change in our constitution, in the constitution of OIL or that of the CONTRACTOR.

7. The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

8. The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the purchase CONTRACT has been placed.

9. Notwithstanding anything contained herein above, out liability under this Guarantee is limited to Indian Rs./US$(in figures) _____ (Indian Rupees/US Dollars (in words) _____) and our guarantee shall remain in force until _____(indicate the date of expiry of bank guarantee).

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of OIL under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of OIL under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ date of _____ 20___ at _____

WITNESS NO.1

_____
(Signature)
Full name and official address
(in legible letters)
Stamp

_____
(Signature)
Full name, designation and address
(in legible letters)
With Bank

Attorney as per power of
Attorney No._____
Dated _____

WITNESS NO.2

_____
(Signature)
Full name and official address
(in legible letters)
Stamp

Formats for calculation of Local Content in Goods:

A. GOODS: (As per Enclosure II of PP-LC Policy)
CALCULATION OF LOCAL CONTENT- GOODS

Name of Manufacturer	Calculation by manufacturer Cost per one unit of product			
Cost component	Cost (Domestic component) a	Cost (Imported component) b	Cost Total Rs./Foreign Currency (To be specified by the manufacturer) c = a+b	%Domestic Component d = a/c
I. Direct material cost				
II. Direct labour cost				
III. Factory overhead				
IV. Total production cost				

Note:

$$\% \text{ LC Goods} = \frac{\text{Total cost (IV.c)} - \text{Total imported component cost (IV.b)}}{\text{Total Cost (IV.c)}} \times 100$$

$$\% \text{ LC Goods} = \frac{\text{Total domestic component cost (IV.a)}}{\text{Total Cost (IV.c)}} \times 100$$

As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content. *(Applicable for Foreign Purchase / Global Tenders)*

******

ANNEXURE- XII

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 **.....** 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 Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

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

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

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

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

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

Section: 2 -Commitments of the Bidder/Contractor

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

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

exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

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

(3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

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

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

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

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

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

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

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9- Pact Duration whichever is later**. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings

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 Earnest Money Deposit / Bid Security.

(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 Security Deposit / Performance Bank Guarantee.

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 Principal will enter into Pacts on identical terms with all bidders and contractors.

2. The Bidder / Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

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

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. However, the Independent External Monitor shall give an opportunity to the bidder / contractor to present its case before making its recommendations to the Principal.

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. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

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

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

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

.....	**.....**
For the Principal	**For the Bidder/Contractor**
	Witness 1: .....
	Witness 2: .....

Place.
Date .

*****

REVISED BID SECURITY FORM (BANK GUARANTEE)

Ref. No. Bank Guarantee No.

TO
OIL INDIA LIMITED
For DGM-SERVICES
RAJASTHAN PROJECT
JODHPUR-342005

WHERAS, (Name of Bidder) …… (hereinafter called "the bidder") has submitted their Bid No. ..... dated ……for the provision of certain OILFIELD services (hereinafter called "the Bid") against OIL INDIA LIMITED, RAJASTHAN PROJECT, JODHPUR (hereinafter called the "Company")'s IFB No….. . KNOW ALL MEN by these presents that we (Name of Bank) …… of (Name of country) …… having our registered office at …… (hereinafter called "the Bank") are bound unto the Company in the sum of (……..)* for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the common seal of the said Bank this ……. Day of …… , 2017.

THE CONDITIONS of this obligation are:
1. If the bidder withdraws their bid during the period of bid validity specified by the Bidder;
Or
2. If the bidder, having been notified of the acceptance of their bid by the Company during the period of bid validity:
- fails or refuses to execute the Form of Contract in accordance with the
Instructions to bidders in the tender documents, or
- fails or refuses to furnish the Performance Security in accordance with the Instructions to bidders in the tender documents;
Or
3. If the bidder furnishes fraudulent document/information in their bid

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable/email), without Company having to substantiate its demand, provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of one or two or all of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**) and any demand in respect thereof should reach the bank not later than the above date.

SIGNATURE AND SEAL OF THE GUARANTOR……
Name of Bank & Address……
Witness ……..
Address……..

(Signature, Name and Address)
Date……
Place……

· The bidder should insert the amount of the guarantee in words and figures denominated in the currency of the Company's country or an equivalent amount in a freely convertible currency.

· The Date of Expiry of Bank Guarantee should be 210 days after the bid closing date as stated in the tender document

The details of the issuing bank and controlling bank are as under:

A.Issuing Bank
1. Full address of the bank:
2. Email address of the bankers:
3. Mobile nos. of the contact persons:

B.Controlling Office
1. Address of the controlling office of the BG issuing banks:
2. Name of the contact persons at the controlling office with their mobile nos. and email address:

Signature& Seal of the Bank

The following is the Bank details of OIL for obtaining Bank Guarantee:

Bank Details of Beneficiary	
a) Bank Name	**CORPORATION BANK**
b) Branch Name	**JODHPUR BRANCH (0492)**
c) Branch Address	**No. 76, LK TOWER, CHOPASANI ROAD, JODHPUR-342003, RAJASTHAN**
d) Banker Account No.	**049200201000626**
e) Type of Account	**CURRENT ACCOUNT**
f) IFSC Code	**CORP0000492**
g) MICR Code	**342017002**
h) SWIFT Code	**N/A**
i) Contact No.	**0291-2649128, 2625504**
j) Contact Person Name	**MR. P. RAMNATH DIWAKAR**
k) Fax No.	**-**
l) Email Id	**cb492@corpbank.co.in**

*****

PERFORMANCE BANK GUARANTEE FORM (UNCONDITIONAL)*

To:
(Name of Company …….)
(Address of Company ……..)

WHEREAS (Name and address of Contractor) …….. (hereinafter called "Contractor") had undertaken, in pursuance of Contract No…… Dated …… to execute (Name of Contract and brief description of the work) ……. (hereinafter called "the Contract"), AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a bank guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND

WHEREAS we have agreed to give the Contractor such a Bank Guarantee, now THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of (Amount of Guarantee)** …… (in words) …… …… such sum being payable in the type and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of the guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modifications of the terms of the Contract or of the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until the date (……)**(calculated at **3 months** after Contract completion date).

SIGNATURE & SEAL OF THE GUARANTOR :……
Name of Bank
:……
Address :……
……
Date :……

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* Bidders are NOT required to complete this form while submitting the bid.

**An amount is to be inserted by the guarantor, representing the percentage of the Contract price specified in the Contract, and denominated either in the currency of the Contract or in a freely convertible currency acceptable to the Company as per para 29.0 of Part-1.

The details of the issuing bank and controlling bank are as under:

A.Issuing Bank
1. Full address of the bank:
2. Email address of the bankers:
3. Mobile nos. of the contact persons:

B.Controlling Office
1. Address of the controlling office of the BG issuing banks:
2. Name of the contact persons at the controlling office with their mobile nos. and email address:

Signature& Seal of the Bank

The following is the Bank details of OIL for obtaining Bank Guarantee:

Bank Details of Beneficiary	
d) Bank Name	**CORPORATION BANK**
e) Branch Name	**JODHPUR BRANCH (0492)**
f) Branch Address	**No. 76, LK TOWER, CHOPASANI ROAD, JODHPUR-342003, RAJASTHAN**
d) Banker Account No.	**049200201000626**
e) Type of Account	**CURRENT ACCOUNT**
f) IFSC Code	**CORP0000492**
g) MICR Code	**342017002**
h) SWIFT Code	**N/A**
i) Contact No.	**0291-2649128, 2625504**
j) Contact Person Name	**MR. P. RAMNATH DIWAKAR**
k) Fax No.	**-**
l) Email Id	**cb492@corpbank.co.in**

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NOTE : Bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the original Bank Guarantee in OIL's tender issuing office / upload the same in OIL's e-tender portal along with the technical bid.

The bank guarantee issued by the bank must be routed through SFMS platform as per following details:

(a) "MT 760 / MT 760 COV for issuance of bank guarantee
(b) "MT 760 / 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, Jodhpur Branch, IFS Code - UTIB0000057; Swift Code: AXISINBB057. Branch Address - AXIS Bank Ltd, Prince Tower, Near Jaljog Circle, Residency Road, Jodhpur - 342003"

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