Bid Number: GEM/2022/B/2098484
Dated: 08-04-2022

Bid Document

Bid Details	
Bid End Date/Time	04-05-2022 11:00:00
Bid Opening Date/Time	04-05-2022 11:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	60 (Days)
Ministry/State Name	Ministry Of Petroleum And Natural Gas
Department Name	Oil India Limited
Organisation Name	Oil India Limited
Office Name	Oil India Limited
Total Quantity	4
Item Category	GAS ENGINE DRIVEN CRUDE OIL DESPATCH PUMPSET OF 40 KL/HR DISCHARGE AND 70 KG/SQ CM PRESSURE (Q3)
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	Certificate (Requested in ATC),OEM Authorization Certificate,Additional Doc 1 (Requested in ATC),Additional Doc 2 (Requested in ATC),Additional Doc 3 (Requested in ATC),Additional Doc 4 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	No
Time allowed for Technical Clarifications during technical evaluation	5 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Evaluation Method	Total value wise evaluation

EMD Detail

Required	No

ePBG Detail

Advisory Bank	HDFC Bank

ePBG Percentage(%)	3.00
Duration of ePBG required (Months).	30

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:
GM-FA
Oil India Limited, Duliajan Assam - 786602 Ph: 0374 2808705 (Direct). Details of Beneficiary : OIL INDIA LIMITED Bank Name :HDFC BANK LIMITED Branch Name :Duliajan Bank Account No. :21182320000016 Type of Account :Current Account IFSC Code :HDFC0002118 MICR Code:786240302 SWIFT Code :HDFCINBBCAL NOTE: THE BANK GUARANTEE ISSUED BY THE BANK MUST BE ROUTED THROUGH SFMS PLATFORM AS PER FOLLOWING DETAILS: a. (I)"MT 760 /MT760COV FOR ISSUANCE OF BANK GUARANTEE (ii) “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 HDFC BANK, DULIAJAN BRANCH, IFS CODE – HDFC0002118; SWIFT CODE - HDFCINBBCAL. BRANCHADDRESS: HDFC BANK LIMITED, DULIAJAN BRANCH, UTOPIA COMPLEX, BOC GATE, JAYANAGAR, DULIAJAN, DIBRUGARH, PIN – 786602." b. THE SUPPLIERSHALL SUBMIT TO OIL THE COPY OF SFMS MESSAGE AS SENT BY THE ISSUING BANK BRANCH ALONG WITH THE ORIGINAL BANK GUARANTEE. Contact person: Tushar Ranjan Dutta, Manager Materials, Ph: 03742808705.
(Gm-fa)

Splitting

Bid splitting not applied.

MII Purchase Preference

MII Purchase Preference	Yes

MSE Purchase Preference

MSE Purchase Preference	Yes

1. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.
2. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15%

(Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 100%(selected by Buyer) percentage of total QUANTITY.

GAS ENGINE DRIVEN CRUDE OIL DESPATCH PUMPSET OF 40 KL/HR DISCHARGE AND 70 KG/SQ CM PRESSURE (4 pieces)

(Minimum 50% Local content required for qualifying as Class 1 Local Supplier)

Brand Type	Unbranded

Technical Specifications

Buyer Specification Document	Download

Installation Commissioning and Testing (ICT) details for the above item:

% of Product Cost Payable on Product Delivery	80%
Min Cost Allocation for ICT as a % of product cost	1%
Number of days allowed for ICT after site readiness communication to seller	90 Days

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Krishna Mohan Kumar	786602,Oil India Limited, Duliajan, Assam	4	270

Buyer added Bid Specific Additional Scope of Work

S.No.	Document Title	Description	Applicable i.r.o. Items
1	Tender document View	Tender document-1422066	GAS ENGINE DRIVEN CRUDE OIL DESPATCH PUMPSET OF 40 KL/HR DISCHARGE AND 70 KG/SQ CM PRESSURE(4)

The uploaded document only contains Buyer specific Additional Scope of Work and / or Drawings for the bid items added with due approval of Buyer's competent authority. Buyer has certified that these additional scope and drawings are generalized and would not lead to any restrictive bidding.

Buyer Added Bid Specific Terms and Conditions

1. **Scope of Supply**

   Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods

2. **Generic**

   Bidder financial standing: The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

3. **Generic**

   Bidder shall submit the following documents along with their bid for Vendor Code Creation:

   a. Copy of PAN Card.

   b. Copy of GSTIN.

   c. Copy of Cancelled Cheque.

   d. Copy of EFT Mandate duly certified by Bank.

4. **Certificates**

   Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

5. **Warranty**

   Warranty period of the supplied products shall be as given in specifications from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

6. **Generic**

   Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

7. **Generic**

   While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

8. **Generic**

   The buyer organization is an institution eligible for concessional rates of GST as notified by the Government of India. The goods for which bids have been invited fall under classification of GST concession and the conditions for eligibility of concession are met by the institution. A certificate to this effect will be issued by Buyer to the Seller after award of the Contract. Sellers are requested to submit their bids after accounting for the Concessional rate of GST.
   Applicable Concessional rate of GST : 5%
   Notification No.and date : 3/2017 dated 28/06/2017

9. **Generic**

   Whereever Essentiality Certificate is applicable (PEL/ML), successful bidder should provide Proforma Invoice for processeing for EC application and material should be dispatche after receiving of EC rom DGH. In view of the same, an ATC may be incorporated in GeM, viz, "BIDDER/OEM must provide Proforma Invoice for processeing for EC application within 210 days from date of issue of GeM Contract and

material should be dispatche after receiving of EC rom DGH."

Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization. Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specification and / or terms and conditions governing the bid. Any clause incorporated by the Buyer such as demanding Tender Sample, incorporating any clause against the MSME policy and Preference to make in India Policy, mandating any Brand names or Foreign Certification, changing the default time period for Acceptance of material or payment timeline governed by OM of Department of Expenditure shall be null and void and would not be considered part of bid. Further any reference of conditions published on any external site or reference to external documents / clauses shall also be null and void. If any seller has any objection / grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

This Bid is also governed by the General Terms and Conditions

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---Thank You---

ANNEXURE – I

TECHNICAL SPECIFICATION

QUANTITY: 4 (Four) Nos.

GAS ENGINE DRIVEN CRUDE OIL DESPATCH PUMPSET

Ref: PR no. 1422066

A. PUMP:

1. Type

Horizontal, single acting, triplex plunger pump manufactured as per API Standard 674 / American Hydraulic Institute (ANSI/HI) standards.

2. Capacity and Discharge

The plunger size selected should be adequate to meet the pressure and volume requirements of 70 KG/ SQ.CM and 40 CUM/HR respectively.

3. Pump Speed

The speed limit of the offered pump shall be governed by the maximum allowable speed ratings for single acting plunger type pumps in continuous service conforming to API 674 standards.

NOTE: "Continuous duty" means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application.

4. DESIGN FEATURES:

Pump shall be manufactured in conformation with API 674 / Hydraulic Institute Standard. Following shall be the inbuilt design features of the pump for quick maintenance.
-Large power end access covers and doors.
-Separate cross head and plunger shank construction.
-Open frame cradles
-Interchangeable valve assemblies
-Removable stuffing boxes
-Cover at non-driving end.
-Bolted valve covers, cylinder head and stuffing boxes.
-Horizontal design eliminates number of maintenance problems caused by vibration.

5. Fluid end features
a) Mono Block Fluid End with bolt on type valve covers
b) Suitably designed valves with tapered valve seats pressed onto mono block fluid end
c) Three feed belt driven packing lubricator, to drip feed (Make: preferably PREMIER / MEGA)
d) Suction and Discharge on either side

6. Power End features:

a) The Power end frame shall be single piece that will house crank shaft, connecting rods, crossheads and bearings.
b) Flooded sump Splash Lubrication for power end
c) Sight glass gauge or oil level dipstick

d) The crank pin bearing shall be two-piece precision type (preferably steel backed, precision type, Aluminum alloy/ Tin & Babbitt lined)
e) Heavy duty Taper Roller crankshaft bearings

7. Material of Construction (MOC):

The material of construction (MOC)of following Fluid End and Power End components shall be in accordance to API 674 / Hydraulic Institute Standard and suitable for operating conditions as mentioned in the tender. The bidder shall have to mention in their offer the MOC of the following Fluid end and Power end components of the offered pump with the applicable ASTM, AISI, ASME or SAE numbers, including material grade. When no such designation is available, the bidder's material specification, giving physical properties, chemical compositions, and test requirements, shall be included in the offer.

Fluid end components:

i. Fluid End Block
ii. Valve cover/valve
iii. Stuffing box
iv. Hard coated plungers
v. General service packing
vi. Valve seats
vii. Valve spring

Power end components:

i. Power frame
ii. Crank shaft
iii. Connecting rod
iv. Crosshead
v. Crosshead pin
vi. Crosshead pin bushing
vii. Extension rod
viii. Crank pin bearing (two piece)

8. Testing of Materials:

(i) The bidder shall specify the ASTM optional tests and inspection procedures that may be necessary to ensure that materials are satisfactory for the service. Such test shall have to be mentioned in the bidder's offer. The bidder shall have to submit detail test certificates for the material testing mentioned in their offer prior to pre- dispatch inspection of the pump sets.

(ii) The bidder shall have to provide undertaking along with the offer that the offered materials of construction of the pump are suitable for the specified operating conditions (as mentioned in the tender) and as required by API 674 / Hydraulic Institute Standard. The materials prohibited by the API 674/ Hydraulic Institute Standard are not used in the offered pump.

9. Duty / Service

The pump should be designed for continuous duty application. Necessary credentials in this regard, in the form of product catalogues / brochures from OEM should be furnished.
NOTE : "Continuous duty" means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application.

10. Liquid to be handled:

The pumping unit should be suitable for pumping crude oil. A recent Test report of a typical sample is provided to assist the selection process:

API Gravity at 60 Deg F	: 30
PH	: 7.2
Salinity (ppm)	: 4400
CO3	: NIL
HCO3	: 305
Pour Point (Deg C)	: 27
Water Content (% v / v)	: 21
Pumping Temp	: 34 to 35 Deg C
Viscosity	:13 cp @ 26 Deg C, 17 cp @ 24 Deg C, 29 cp @ 22 Deg C
Sp. Gravity	: 0.8574 @ 35 Deg C and 0.8718 @ 15 Deg C

11. Suction condition: Positive suction

12. Name plate, rotation arrows and Marking of OIL's Purchase Order

A nameplate shall be securely attached at a readily visible location wherein the manufacturers name, machine serial number, maximum and minimum design limits and rating data, maximum allowable working pressure and temperatures, hydrostatic test pressure etc. should be clearly indicated.

Rotation arrows indicating direction of rotation of major items should be cast in or attached.

OIL's Purchase Order to be permanently embossed/ engraved/ punched on the body of each pump.

13. Accessories:

Following Accessories are required to supply along with each pump set:

(i) Accessories in discharge line:

“Full flow, suitably sized and rated, spring loaded, Reset Relief Valve, mounted on the discharge piping. (Make: Preferably OTECO/ BAIRD / CAMERON)

N.B: The relief valve is to be set at 110% of our maximum pressure requirement at the time of delivery.

“Liquid filled discharge pressure gauge having a range up to 100 Kg/ Sq.cm, with built in dampening mechanism to minimize fluctuations for accurate response to pressure changes.
(Make: Preferably OTECO/ CAMERON / MARTIN DECKER)

“Suitably designed Maintenance Free Discharge Pulsation Dampener

" Discharge Valve: Gate or Ball Valve with RTJ Flanged end of suitable size and pressure rating conforming to API 6D with a pair of companion RTJ flange (weld neck) conforming to ANSI B16.5 (latest edition) complete with two no RTJ gaskets and requisite no of studs and nuts.

" Bypass valve: Gate or Ball Valve with RTJ Flanged end of suitable size and pressure rating conforming to API 6D with a pair of companion RTJ flange (weld neck) conforming to ANSI B16.5 (latest edition) complete with two no RTJ gaskets and requisite no of studs and nuts. The size of the bypass valve should be same as discharge valve.

" Check Valve of suitable size and pressure rating, full opening/full bore type conforming to API 6D specification with bolted cover, renewable seat, RTJ Flanged ends along with a pair of companion RTJ flanges (weld neck) conforming to ANSI B16.5 (latest edition) complete with two no RTJ gaskets and requisite no of studs and nuts. The size of the Check valve should be same as discharge valve.

“Drain valve of suitable size and pressure rating (to depressurize the system when carrying out maintenance of the unit).

“Suitably designed flexible Metallic Braided hose of suitable pressure rating with companion flanges and fitting.

“Complete set of fittings, interconnection piping and companion flanges with proper bolting, gaskets, dampener brackets, blind flanges etc. required for mounting all items mentioned above

NB:

All the pipes valves and fitting of the discharge line should be of same size.

All valves should be individual. Combo valves are not acceptable.

Dampeners should be of Carbon Steel construction built to ASME pressure vessel codes and code stamped.

(ii) Accessories in Suction lines:

“Maintenance free suction stabilizer (volume bottle type)

“Pressure gauge

“Suction Valve: Flanged end Gate/ Ball valve of suitable size and pressure rating conforming to API 600 specification, with a pair of companion flanges, gaskets nuts and bolts.

“Suitably designed flexible Metallic Braided hose of suitable pressure rating with companion flanges and fittings.

“Complete set of fittings, interconnection piping and companion flanges with proper bolting, gaskets, dampener brackets, blind flanges etc. required for mounting all items mentioned above.

NB:
All the pipes valves and fitting of the suction line should be of same size.

Suction Stabiliser should be of Carbon Steel construction built to ASME pressure vessel codes and code stamped.

(iii). A continuous duty Foot mounted horizontal type single suction single stage **Centrifugal Charge Pump** conforming to API 610 Std/ IS 15657 / ISO 13709(Pump Design), direct driven by a flameproof(FLP) Electrical Motor, suitably sized to provide 1.5 times the input flow volume requirement of the triplex plunger pump should be provided against each pumping unit. Bidders to confirm the same categorically in their bid.

The basic requirements of the Charge Pump system shall be as follows:

B. **Charge (Booster) Pump:**

i. Service: Continuous.
Continuous duty means pump having service operation on full load for a period of 8 hours to 24 hours per day

ii. Capacity
Discharge volume: 1.5 times the input flow volume requirement of the triplex plunger pump

Discharge Pressure - Suitable for the Main Triplex Plunger Pump

RPM - 1500 (Max.)

iii. Suction condition: Flooded.
iv. Liquid to be handled: Crude oil (detail characteristics is same as given under Clause 10)
v. Pumping temperature: 35 to 40 Degree Centigrade
vi. Lubrication: Oil lubricated
vii. Impeller shall to be closed type
viii. Cooling Gland: Internal gland cooling

a. Material of Construction (MoC):

The MOC of the booster pump should conform to:

(i) API 610: Clause 5.12 with special attention on Appendix-G and Appendix-H.

OR

(ii) IS-15657: Clause 5.12 with special attention on Annex - G and Annex-H.

(iii) The bidder has to mention MOC of following parts of the offered charge pump in applicable international standard like IS, ASTM, ISO, EN, JIS etc. including the material grade. Where international standard materials are not available internationally recognized national or other standard may be used. If no such designations are available, the vendor's material specification, giving physical properties, chemical compositions and test requirements shall be included in the offer

a. Pressure Casing
b. Impeller
c. Wear ring
d. Shaft
e. Sleeve

b. Material testing & inspection:

a. The bidder shall have to specify the optional tests and inspection procedure that are necessary to ensure that materials are satisfactory for the service.
b. The bidder shall have to provide undertaking along with the offer that the offered materials of construction of the charge pumps are suitable for the specified operating conditions & conforming to the standard (as mentioned in the tender).

1. <u>Details of Charge (Booster) Pump Motor:</u>

The Booster Pump shall be directly coupled with an Electric Motor suitable for use in Gas group IIA & IIB, Zone 1 Hazardous areas of oil mines/process installations and with following Specifications:

I. Type: Squirrel cage induction motor, horizontal foot mounted with bi-directional cooling fan at NDE
II. Ratings:
a. **<u>Operating Voltage:</u>** 3 phase, 415 V +/- 5% AC
b. **<u>Frequency:</u>** 50 Hz +/-5%
c. **<u>Output (HP/KW):</u>** Min. 10% higher than the pump/ load requirement (Calculations for selection of the Motor wrt Pump Load shall have to be submitted along with the offer).
d. **<u>RPM:</u>** To match pump requirement
e. **<u>Duty:</u>** Continuously rated, S1 duty

f. **<u>Insulation Class:</u>** Class F, temperature rise limited to class B

g. **<u>Protection:</u>** IP 55 Minimum

III. Enclosure: Flameproof enclosure 'Ex-d' suitable for use in Zone -1 and presence of Gas Group IIA and IIB Hazardous Area as per IS/IEC 60079-1(2007)

IV. Applicable Standard: The motor shall conform to IS/IEC 60034-1(2004), IS/IEC 60079-1(2007)
Appropriate test certificate shall have to be furnished as stated in para 4.0 below.

V. Painting: Epoxy DA grey

VI. Terminal box: Motor terminal box (Flameproof) with six nos. of terminal studs of adequate current carrying capacity, suitable for use in oil and gas mines, fitted with 02 (two) nos. double compression FLP cable glands. The glands shall be suitable for entry of suitably sized (as per motor rating) 4 core PVC insulated, PVC sheathed, multi-stranded aluminium cable armoured with GI strip/wire.

VII. Earthing: 1 (one) no. inside terminal box and 2 (two) nos. on the body of the Motor.

VIII. **<u>Make:</u>** Bharat Bijlee/ Crompton Greaves/ Kirloskar/ Siemens / ABB / Marathon / Laxmi Hydraulics/ NGEF.

2. Motor Starter Specification:

A. <u>General notes:</u>

i The starter shall be placed inside safe area and hence is not required with FLP enclosure.

ii Starter shall be fully automatic Star-Delta type.

iii It shall be Type II coordination.

iv **<u>Incomer:</u>** Incomer of the starter shall be a 3P, 415V AC, **min 25kA breaking capacity** MCCB with electronic trip unit (adjustable long time and short time with instantaneous trip, with individual time settings), and with direct rotary handle operable from outside the enclosure. **It shall be rated min. 200% of motor full load current.**

v Neutral shall not be used in the control circuit, [as the source (generator/transformer) neutral shall be grounded with high resistance as per CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, clauses 100.(1)]. , **<u>A control transformer (415V / 230V, 100VA)</u>** to be used in the starter panel for control supply.

vi Double pole MCB shall be incorporated in the motor control circuit for isolation & protection of the control circuit.

vii Main Contactor, Star Contactor and Delta Contactor shall be 3 pole and AC3 rated.

viii **Main and Delta contactor shall be rated min 150% of the motor full load current and**

ix **Star contactor shall be rated min 80% of the motor full load current**

x Appropriate interlock shall be incorporated between the star and delta contactor. The transition from star to delta contactor shall be automatic with the help of an electronic timer.

xi The starter control shall have remote start/stop capability (with push button station near the motor).

xii One local/remote selector switch shall be provided in the starter so that the pump-motor can be started **either in** local mode or in remote mode as required, however the scheme shall be such that the motor can be 'STOPPED' from both local or remote at any time**.**

xiii The control voltage of remote push button stations for motors is to be limited to maximum 30 V as per CEA Regulations, 2010, Clause 102(iv) & Clause 110(4)(i). Therefore, an intrinsically safe barrier (ISB) shall be placed between the remote pushbutton station and motor starter panel, so that no dangerous voltage is transmitted to hazardous area for operation of the remote pushbutton station. The Intrinsically Safe Barrier is to be placed in the motor starter cubicle. **<u>Make & Model of ISB - PEPPERL+FUCHS (Model: KFA6-SR2-EX2.W)</u>**

xiv Starter shall have minimum of 2 nos. potential free NO and NC spare contacts each for interlocking SCADA or other instrumentation system.

xv **<u>All interconnections shall be done by solid electrolytic grade tinned copper links, suitably rated</u>**

xvi All cables of control circuit shall be suitably sized 660/1100 V graded PVC insulated multi-stranded copper cables. Wires shall be properly marked with colored and numbered ferrules for proper identification.

xvii Brought out terminals with suitably rated Aluminium Bars shall be provided for incoming and outgoing cable connection.

xviii Makes of Components:

i) MCCB, Contractor, RCBO, Electronic OLR: Schneider / Legrand / Siemens/ ABB/ L&T

ii) Electronic Time Delay Relay: Siemens / GE / Schneider /ABB/ GIC / Minilec

iii) Ammeter: Automatic Electric/ Schneider / L&T / Rishab

iv) CTs: Kappa/ AE / Rishab

v) Earth Leakage Relay: Schneider / Legrand / Siemens/ ABB/ Havells / GIC

vi) Intrinsically Safe Barrier: Pepper Fuchs

vii) Control Transformer – AE / Kappa / Gujarat Plug-In Devices Pvt. Ltd

B. Protections:

i Short Circuit (in-built in the MCCB)

ii Earth fault (in-built in the MCCB)

iii **Overload through electronic overload** relay with adjustable range (depending on Motor rating), Selectable trip class 10E & 20E, having inbuilt protection against phase failure, automatic or manual reset selectable, stop and test function and trip indication, with trip contact (NC) and signal contact (NO). The electronic overload relay to be connected directly to the contactor with mounting kit as necessary.

Earth-leakage: EL protection shall be provided through separate CBCT & ELR. Earth Leakage current Range shall be 30mA-3A, and time setting shall be 0 secs to 10 secs display.

C. Metering & indication

The panel shall have meters and indication for the following information (MCBs shall be used for protection of circuitry):

i Phase to phase Voltages with 0-500V range analog voltmeter with voltage selector switch for ph-ph voltage selection/measurement.

ii Three phase Motor currents with properly rated CTs with analog ammeter & ammeter selector switch.

iii "Supply ON" indication connected between any two phases.

iv "Motor On" with 'Green' LED indicating lamp.

"Motor Trip on Fault" with 'Amber' LED indicating lamp.

D. <u>Panel Body Construction</u>

i Panel shall be self-supporting and self-mounting and made with sheet steel clad of 2mm thick MS CRCA sheets and built upon suitably sized MS frame work.

ii The MS frame shall be mounted on a sturdy bottom structure made from suitably sized MS channel (L type / C type) with provision for grouting. The height of the bottom frame shall be 650 mm.

iii The panel shall be front operable **with access by double doors.** Cable entries shall be from the bottom. Terminations shall be at the front side behind the 2nd door.

iv Panel shall be dust /vermin proof and weatherproof (IP 54 min). Ventilation louvers shall be provided on both sides; however, louvers shall be shielded with fine wire mesh (inside the panel).

v Special non-deteriorating Neoprene rubber gaskets shall be provided between all joints / door covers. Panel door shall be provided with single turn latches for opening / closing and locking arrangement.

vi All cable entry and exit shall be from bottom. Suitable cable entry arrangement with detachable gland plates and adequate nos. of single compression, heavy duty nickel plated brass glands shall be provided for termination of 1 no. incoming cable, 2 nos. outgoing cables and cables for remote push buttons [sizes to be decided based on rating of the motor].

vii Detachable gland plates for cable entry/exit shall be 3 mm thick MS CRCA sheets.

viii Sufficient space shall be provided in the starter for cable termination, dressing and connecting cable leads to the brought-out terminals

ix The entire metal work shall be treated with minimum seven tank anti-rust/anti-corrosion treatment as per IS and then powder coated in DA Grey color. Painting thickness shall be minimum 50 micron.

x Internal earthing shall be provided for all equipment having earthing terminal and panel doors. Earthing terminals of the components shall be suitably connected to an earth bus inside the panel.

xi Two external earthing studs shall be provided on both side of the panel. The external earthing stud shall be connected with the internal earthing bus with suitable GI hardware. The earth bus shall be connected to the panel at two distinctly different locations.

xii Panel shall be suitably designed to facilitate easy loading & unloading. Lifting hooks to be provided suitably.

xiii Legend plates for the indication lamps, meters, control switches / buttons and labels for the terminals shall be provided.

xiv Danger plate shall be placed on the front and back side.

3. Flame & Weather-Proof Push-Button Station:

Flame proof and weather proof START/STOP push Button Station as per the following specifications shall also be supplied.

i. Materials of construction-Die-cast Aluminium Alloy LM6
ii. Enclosure - Flame proof Exd as per IS/IEC 60079-1(2007).
iii. Protection - IP-55 as per IS-2147
iv. Hazardous Area classification - Zone - 1 & Zone - 2.
v. Gas Group: IIA & IIB as per IS-2148.
vi. Cable entry: 2 Nos. at bottom with 3/4" ET thread. One entry should be provided with FLP double compression gland suitable for 19 mm. O.D. Cable and the other entry should be provided with suitable size FLP stop plug.
vii. Rain hood/canopy: Suitable size canopy to be provided with the PBS for rain water protection.
viii. Mounting: On stand with 650mm height.
ix. Finish: Anti-corrosive Epoxy light Grey shade 631 including canopy.
x. Identification Mark: A plate bearing the Test certificate reference number shall be embossed on the body
xi. Earthing: Provision should be made for one no. earthing stud inside and two nos. earthing studs outside of the PBS unit.
xii. **Make**: FCG / Baliga / FEPL/ Flexpro / Sudhir / SEPL / Prateek

4. Testing and Certification (For Motor, FLP Cable Gland and Push Button Station)**:**

The latest version of standards shall prevail over the standards given in clause: 1.0(IV) and 3.0(II)
Test reports confirming to the above relevant standards shall be submitted along with offer/Bid. The test reports shall either be from an Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body, which is not a part of manufacturer's facilities.
Test certificate no. shall also be embossed on the name plate of the motor and Push Button Station.

5. Earthing

Supply of Earthing materials for the Motor, Starter Panel and the push button station shall be in the scope of the party.

i 2" dia., 2-metre-Long G.I. Pipe earth electrodes with 4 nos. L-shaped links welded on the body of the electrodes at top end with holes for connecting GI straps. Earth electrode shall be hot dip galvanised after completion of all welding works. Qty. – 2 nos. for each motor and 2 nos for each Starter panel.

ii Min 25 mm X 5 mm G.I. strips for earth connection (from earthing studs of motor, starter panel and push button station to earth electrodes).

6. Scope of installation and commissioning:

i The Motor, Starter Panel and the push button station shall be installed, tested and commissioned at site by the successful bidder.

ii Making/construction of earth pits as per IS: 3043 [2 nos. for each motors and 2 nos. for each Starter panel], laying and connection of earth strips from Motor, Starter Panel and Push Button station to earth pits. Earth pit shall be complete with brick enclosure of minimum inner dimensions as 600mm (L)X600mm(B)X500mm(H) (250mm below ground, 250mm above ground) and cover. The push button station may be connected to the same earth grid of the motor.

iii Glanding and termination of each cables to and from the starter panels, motor and push buttons shall be in the scope of the party. Suitably sized Glands, tubular terminals etc. shall be supplied by the party. However, supply and laying of cables will be facilitated by OIL.

7. Documents:

I. Bidder shall furnish details of the electrical items in their offer as per the above specifications IN THE SAME ORDER. All of the above shall form part of the offer acceptability. Specific type and make of components should be mentioned clearly.

II. The following documents shall be submitted with the offer:

a. Motor technical Datasheet
b. Test certificate of the offered Motor, FLP Push Button Station and FLP Gland for suitability for use in Zone -1 and Gas Group IIA and IIB hazardous area.
c. Calculation Sheet in support of offered Motor with respect to Pump Load.
d. Schematic drawing of the starter panel.
e. BOM including make and model no. of each offered component of the starter panel.

III. The successful bidder shall obtain OIL's approval for the following drawings

a. GA and dimensional drawing of all electrical equipment
b. Power and control circuit diagrams of the starter panel.
c. Bill of Materials.
d. Test Certificate of the FLP Motor, PBS.

Manufacturing of the unit is to be started only after written approval of the drawings/documents by OIL.

IV. Four bound sets of the following documents shall be submitted with the supply:

a. Approved GA and dimensional drawing of all equipment
b. Approved Power and Control circuit diagrams
c. Bill of materials with technical details of various components of the Starter Control Panel
d. List of recommended spares
e. All test certificates
f. Guarantee Certificates

V. One laminated copy of the approved power & control circuit drawing shall be pasted inside of the front door of the Starter Control Panel.

8. Inspection and warranty:

I. The motor/starter/PBS shall be inspected & tested at the manufacturers' premises by OIL reprehensive before dispatch.

II. The Motor and starter panel shall be guaranteed for 1 (one) year from the date of supply. Guarantee certificates shall be duly signed and stamped by the supplier and shall be provided along with the supply.

9. Transportation:

During transportation all electrical equipment are to be suitably packed to avoid water ingress or transit damage.

C. SPEED REDUCTION GEAR BOX:

The speed reduction from the Prime Mover (Gas Engine) at its rated rpm to the desired rpm of pump shall be effected by means of a separate external foot mounted gear box installed between the prime mover and the pump.

The Gear Box should be SHANTHI/GREAVES/ PREMIUM Make parallel shaft speed reducer with a gear rated to designed HP from an Gas Engine at rated RPM to the pump at desired RPM, with a suitable Gear ratio, and a minimum service factor of 1.75 as per American Gear Manufacturers Association (AGMA SF). The unit design includes cast iron housing, helical gear elements, anti-friction roller bearings on all shafts, and a self-contained splash lubrication system with a shaft driven lube oil pump and radiator type air/oil cooler to meet the thermal horsepower requirements.

D. DRIVE ARRANGEMENT:

The drive arrangement will involve flow of prime mover power through a flywheel mounted clutch PTO to the input shaft of an external foot mounted gearbox and finally to the crankshaft of the triplex pump. An extension shaft supported by pedestal bearings should be incorporated between the output shaft of the clutch PTO and the input shaft of the external foot mounted gear box to facilitate construction of a fire brick wall for adherence of safety norms associated with deployment of such equipment within hazardous areas. The length of the extension shaft as well as its

diameter and material should be suitably designed to match the power torque requirements of the transmission and facilitate construction of brick wall by OIL as mentioned.

Suitably selected Flexible Disc / Grid Member Couplings with taper lock bushing should be incorporated to transfer power from the prime mover to the triplex pump through the transmission, as illustrated in the schematic diagram "General Arrangement of Engine Driven Reciprocating Pumping unit".

N.B.: All rotating parts should be covered by suitable non sparking guards.

E. PRIME MOVER (Gas Engine):

The Prime Mover should be a four stroke, spark-ignited, stoichiometric (Air-Fuel Ratio), naturally aspirated or turbo-charged, radiator cooled Gas Engine, rated for continuous power in accordance with ISO 3046/BS5514/IS10000 standards and capable of developing a net minimum BHP in the range of 150-200 HP at 1500 rpm with a maximum compression ratio of 12:1.
The engine should comprise of the following sub systems:

a) Cooling System

i. The cooling system of water cooled engine should comprise of an engine mounted water pump, an industrial type heavy duty radiator suitable for operation in ambient temperature of 48 Deg C and a blower fan.
ii. The engine jacket water cooling system should be a closed circuit design with provision for filling, expansion, and de-aeration. The cooling pump should be driven by the engine. Coolant temperature should be internally regulated to disconnect external cooling system until operating temperature is achieved.
iii. Radiator, Engine Mounted: Heat rejected to the engine jacket water shall be discharged to the atmosphere through a close coupled radiator. The radiator shall be sized to cool the engine continuously while operating at full rated load and at site conditions of 48 Deg C ambient.
iv. Blower Fan: The radiator cooling fan shall be a blower type driven from the engine. Air shall be drawn from the engine side and exhausted through the radiator core with no more than 12.7 mm(0.5 Inch) of water external restriction in addition to core restrictions.
v. Fan and Belt guarding: The fan, fan drive, and fan belts shall be covered with punched steel mesh guarding for personnel protection.

b) Air Intake System

The air intake system should comprise of a heavy duty engine air cleaner mounted on the engine with a vacuum indicator and air intake manifold with dry element requiring replacement no more frequently than 500 hours or once each year. Level of suspended particulate matter in ambient air at site is 75µg/m³ (max.).

c) Electric Starting System:

The engine should have an electric starting system comprising of a Maintenance Free Heavy Duty Battery pack of reputed make having a minimum capacity 180 ampere hours with a alternator mounted on the engine for a battery charging and a 24 Volt starter (preferably of LUCAS TVS/DELCO REMY make), starter relay, and automatic reset circuit breaker to protect against butt engagement. Batteries shall be maintenance free, lead acid type mounted near the alternator. Batteries should be housed in a hard rubber or polypropylene case with provision for venting. Required cables should be furnished and sized to satisfy circuit requirements.

d) Battery Charger:

The battery charger is to be a solid-state device with adjustable float voltage control. It is to be a constant voltage device with current limit, and it is to include an equalize switch which will allow the battery to be overcharged for maintenance purpose.

e) Ignition System:

The ignition system should be a shielded ignition comprising Altronic III/V Engine driven ignition timer, Ignition Coil, High Tension and Low Tension Wiring Harness, Transformer and Spark Plugs shall incorporate gold palladium electrodes for reliability and life (Preferably STITT/ CHAMPION make)

f) Exhaust System:

i. The exhaust system should comprise of water cooled exhaust manifold, stainless steel exhaust flexible connection, residential type exhaust silencer, spark arrestor and piping connections
ii Heavy walled piping of schedule 40 with radii of 90 Deg bend at least 1½ times the pipe diameter. Piping should be installed with appropriate insulation and shielding.
iii Piping should be supported and braced to prevent weight or thermal growth being transferred to the engine and flexible expansion fittings provided to accommodate thermal growth.

g) Fuel System: The fuel system should comprise of

i. Governor (Preferably WOODWARD make).The engine governor shall be Mechanical- Hydraulic / Electronic Speed Control with EG Electro-Hydraulic actuator or Barber Coleman Equal. Speed drop shall be extremely adjustable from 0 (isochronous) to 10% from no load to full rated load.
ii. Carburetor (Preferably IMPCO make),
iii. Gas pressure regulators (preferably VANAZ/FISHER) to regulate gas pressure from 50 PSIG-20 PSIG to the required pressure at carburetor intake point. 50 PSIG- 20 PSIG fuel gas shall be available at site for taping
iv. Gas Filter and related linkages. The gas Filtration unit should be place on a separate skid for convenience of operators.
v. Fuel inlet line to the engine shall be having stainless steel flexible connection to take care of vibration/shock if any, in the system.

h) Lubricating System:

The lubricating system should comprise of lubricating oil pump, lubricating oil filter with a replaceable paper element, lubricating oil cooler, lubricating oil pan and crankcase breather.

i. The lubricating oil pump shall be a positive displacement type that is integral with the engine and gear driven from the engine gear train. The system shall incorporate full flow filtration with bypass valve to continue lubrication in the event of filter clogging.
ii. The bypass valve must be integral with the engine filter base of receptacle.

i) Instrument Panel:

The engine mounted instrument panel shall consist of a shock-mounted formed and welded enclosure. Provide Metric marked gauges as above.

The instrument panel should include the following:

a. Lubricating Oil pressure gauge
b. Lubricating oil temperature gauge
c. Water temperature gauge
d. Starting Switch
e. Ignition Switch
f. Mechanical/Digital tachometer and hour meter
g. Circuit Breaker
h. Ampere meter
i. Electric service meter

j. Engine Safety Controls:

Engine mounted safety shut off/trip system for tripping the engine in the event of

a. Low lubricating oil Pressure
b. High cooling water temperature
c. Engine over speed
d. Over crank

k) Other Features:

i. flexible coupling / direct coupling
ii. flywheel with housing
iii. lifting eyes
iv. coupling guard if applicable
v. guards over belt drives (blower fan, water pump drive pulley, timing pulley)
vi. standard painting
vii. suitable hand throttle control
viii. mechanical hour meter
ix. SAE standard rotation.
x. Gas shut off valve for engine fuel gas line should close automatically when the engine is stopped.

N.B: Provision of guards over belt drives and couplings has become mandatory as per recommendation of OISD (Oil Industry Safety Directorate) & DGMS (Director General of Mines & Safety).

GENERAL NOTES ON ENGINE:

a. The engine shall conform to ISO: 3046 specifications and shall be rated for continuous power with an over load power rating of 110% of the continuous power corresponding to engine application for a period of 1 hr within a period of 12 hrs operation.
b. The engine governing should be in accordance with Class A Governing specified in BS : 3109 : 1985 (or latest)
c. The bidder should submit the following information along with relevant performance rating Curves and engine product catalogue:
    i. Gross HP developed at rated RPM
    ii. Deduction for fan and other ancillary equipment.
    iii. Net HP developed at rated RPM
    iv. iv) Specific fuel consumption at rated power as well as at 110%, 75%, 50% and 25% of rated load

d. The prime mover of pump should be suitable for operation at the following site condition:

Maximum Temperature : 48 DEG C
Minimum Temperature : 05 DEG C
Maximum Humidity at 21 DEG C : 100 %
at 35 DEG C : 95 %
at 41 DEG C : 70 %
Maximum Altitude above sea level : 150 mt

e. Composition of Fuel Gas:

The engine should be capable of developing required BHP as detailed in Clause C. above with fuel gas composition given below:

CONSTITUTION	Range by % VOLUME
Methane	85.7 - 93.52
Ethane	2.45 - 6.55
Propane	1.28 - 3.12
Nitrogen	0.53 - 1.21
Carbon-dioxide	0.01 - 0.57
Iso-Butane	0.31 - 0.75
N-Butane	0.4 - 1.14
Iso-Pentane	0.19 - 0.47
N-Pentane	0.17 - 0.38
Hexane	0.34 - 1.16
Gravity	0.6204 -0.6919
Gross Calorific Value	9636.8- 10590.8 Kcal/SCUM
Net Calorific Value	8704.3- 9595.4 Kcal/SCUM
Moisture content:	21.0 - 120.0 LB/MMCFT (336.0 - 1992.0 KG/MMSCM)

Bidder has to include required gas conditioning & fuel supply system in the scope of work to suit the requirement of the engine offered.

f. The fuel gas system shall consist of a minimum of following components but shall not be limited to these:
    i. Main line pressure regulator.
    ii. Pressure relief safety valve.
    iii. Gas scrubber tank.
    iv. Gas fuel filter.
    v. Interconnecting gas piping from main line pressure regulator to engine.
    vi. The gas conditioning & piping should be carried out in such a way as to prevent condensate carry over to engine.
g. The bidder must undertake and confirm from OEM's that the equipment to be supplied are not going to become obsolete for the next 10 years and provisioning of spares can be continued.

F. Certificates and Documents to be forwarded:

I. The following documents should be forwarded along with the quotations:

i. Product line catalogue, specifying materials of construction and constructional features of the triplex plunger pump and technical literatures of all ancillary equipment.
ii. Performance chart of the plunger pump including all technical calculations such as hydraulic horse power, volumetric efficiency, mechanical efficiency, RPM, gear ratio, maximum plunger load, NPSH requirement, etc.
iii. Detail calculation to justify that BHP of the offered prime mover engine is suitable to meet the pumping requirement as specified in the tender. The power losses or mechanical efficiency of each component of the drive system such as coupling, gear box etc. are to be mentioned clearly.

II. The following documents shall have to be forwarded within a month of issue of LOI or placement of firm order

i. A foundation diagram for the complete pump set indicating the static and dynamic loads of the package.
ii. Pump Package Unitization plan/ drawing.

III. Material test (MOC) certificate of the fluid end components and power end components must be forwarded along with the pre-dispatch inspection notice from supplier.

IV. The following documents must be forwarded along with the supply of equipment.

i. certified test results
ii. certificate of hydrostatic testing
iii. manufacturers certificate of authenticity
iv. Certificate of test / conformance of pump and associated ancillaries like relief valves, pressure gauges, dampeners, Flexible Metallic braided hose etc.
v. Two sets of operation and maintenance manuals including trouble shooting, parts catalogue of pump, engine, gear box and all other accessory equipment for each set.
vi. One set of composite operational manual per pump set for the complete pump package including control panel consist of clear cut simple instruction for start, stop, restart, significance of various display in the control panel, and negotiation of alarms etc.

NOTE: All the above mentioned document (Under Clause 13-IV) shall have to be packed separately with packing list and labeled with following
OIL's Purchase order No: _____
To,
Head- Field Engineering
OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

G. INSTRUMENTATION FOR CODP:

1.0 The CODP shall be controlled by a Programmable Logic Controller (PLC) with Panel mounted HMI- Human Machine Interface for display & alarm of critical parameters and safety shutdown. The HMI shall be color TFT display (minimum of 10 Inch) with touch screen and all alarm/ shutdown set point shall be configurable via HMI.

2.0 The PLC shall be Rockwell Automation make SLC 5/03 processor or equivalent with necessary I/O (Input/Output) modules. It shall also be provided with an Ethernet communication module for remote monitoring of the CODP parameters from control room.

3.0 The Control panel shall be designed for installation in the Engine side (behind the Fire Wall) of the CODP. In case, it is designed to install the panel in pump side then the PLC shall be housed in an explosion proof control panel with a glass window for viewing the CODP parameters. The Control panel shall be certified to use in Zone1, Zone2, Gas group IIA & IIB (Division 1, Division 2, Gas group Class I, Group C&D) environment.

4.0 The following instrumentation items shall be provided for CODP. However, the supplier has to include, but not limited to all the items such that the supplied system is functionally and operationally complete in all respect:

Pump Suction Pressure Transmitter
Pump Discharge Pressure Transmitter
Pump Vibration Switch

Oil level switch for Pump sump
Oil level switch for Gear Box
Oil Level switch for Engine sump
Engine Oil Pressure Transmitter
Engine Water Temperature Transmitter
Engine Speed Transmitter
Pump Outlet Flow Transmitter

5.0 All electronic/electrical instruments and equipment use in hazardous area should fulfil the following:

5.1 Item shall be of a type and specification confirming to the relevant standards as specified in the Regulation 107(2) of Oil Mines Regulation-2017 and complying the provisions therein.

5.2 Bidder should supply documents specifying the type, details of specification, reference of the particular standard, test criteria as per the standards and status of testing, place of testing, copies of test reports from Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body which is not a part of manufacture's facilities.

5.3 In this regard, Bidder may refer OMR-2017, Notification dated 18th October 2017, published in the Gazette of India, under Ministry of Labour and Employment, Directorate General of Mines Safety, published on 2nd November 2017.

6.0 The supplier has to provide 3 (THREE) sets each of the following documentation:

Operation and maintenance manual of each field Instrument
Instrument list and Instrument data sheets
Test & Calibration reports
As built & Hook up drawings
Wiring diagram of the control panel
Detailed operation and maintenance manuals of the PLC system
Ladder logic developed for the PLC

7.0 The supplier has to provide ONE Lap-top computer for Programming the PLC & HMI. The minimum technical specification for the Lap-top shall be as follows: Processor-8th Gen core-i5, RAM-8GB, HDD-500 GB, 14 inch HD LED Display, OS-Latest Windows OS, 1 year anti-virus license with carry case for comfortable handling. It shall be loaded with the all relevant PLC software (programming & communication software). All the required software shall have lifetime validity license and bidder shall provide license preferably as USB dongle. All necessary back up shall also be loaded in the lap-top.

8.0 The Technical Specification of the Instruments for CODP is as given below:

Technical specification for Instruments:

8.1. PUMP SUCTION PRESSURE TRANSMITTER
MAKE : DRUCK or Equivalent
MODEL : PTX1240
RANGE : 0 TO 200 PSI
OUTPUT: 4 TO 20mA

8.2. PUMP DISCHARGE PRESSURE TRANSMITTER
MAKE : DRUCK or Equivalent
MODEL : PTX1240
RANGE : 0 TO 3000 PSI
OUTPUT: 4 TO 20mA

8.3. PUMP VIBRATION SWITCH
MAKE : MURPHY or Equivalent
MODEL : VS2EX
To detect vibration / Shock in 3 places of motion
Fully adjustable
Manual / Electrical reset

8.4. OIL LEVEL SWITCH (PUMP SUMP, GEAR BOX, ENGINE)
MAKE : MURPHY or Equivalent
MODEL : EL150X
Float : Brass
Contact rating: 2A, 30 VDC

Max Working Pressure: 25 PSI

8.5. ENGINE OIL PRESSURE TRANSMITTER

MAKE : DRUCK or Equivalent

MODEL : PTX1240

RANGE : 0 TO 200 PSI

OUTPUT: 4 TO 20mA

8.6. ENGINE WATER TEMPERATURE TRANSMITTER

MAKE : MATE or Equivalent

MODEL : 4100

RANGE : 0 TO 300 DEG F

8.7. ENGINE SPEED TRANSMITTER

MAKE : ELECTRONIC DATA DEVICES or Equivalent

MODEL : FTC 4.02420

RANGE : 0 TO 2000 RPM

OUTPUT: 4 TO 20mA

8.8. TURBINE FLOWMETER

MAKE : NU FLO or Equivalent

MODEL : MC II PLUS EXP

POWER SUPPLY: MAX 30 VDC

OUTPUT: 4 TO 20 mA

LCD DISPLAY: FLOW RATE & TOTAL FLOW

9.0 CONTROL PANEL:

The PLC based control panel shall be suitably located for a clear view. The control panel shall be manufactured of a corrosion resistant material and shall include permanent labeling of all controls and instrumentation. The control panel shall include an HMI- Human Machine Interface (colour TFT display) with touch screen and alarm/ shutdown set point shall be configurable via HMI. The display/monitoring panel shall be an anti-reflective glass panel for increased visibility in intense sunlight.

There shall have the following features:

All normal operational functions should be available using panel mounted push buttons.

Digital readout with shutdown and alarm annunciation for the following:

i Pump discharge pressure
ii Pump suction pressure
iii Engine oil pressure
iv Engine water temperature
v Engine speed (rpm)
vi Pump outlet flow

The following discrete alarms/shutdowns should also be provided:

i Pump crank case oil level
ii Gear reducer oil level
iii Pump vibration
iv Engine radiator jacket water level 1/2
v Engine low oil level
vi Emergency shutdown push button

24 VDC control power supply shall be provided for the following devices:

i Pump discharge pressure transducer
ii Pump suction pressure transducer
iii Engine oil pressure transducer
iv Engine water temperature transducer
v Engine rpm transducer
vi Pump discharge flow meter

N.B.: A fuel gas solenoid valve should additionally be incorporated in the fuel gas line of the engine to cut off the fuel supply and protect the engine in the event of an engine over speed situation.

SPECIAL NOTES:

1. The bidder must submit detailed technical specifications with all relevant technical catalogues, statutory certificates etc. for Instrumentation items of their offered model no along with the bid for technical evaluation.
2. Bidder shall submit necessary documents along with the offer for all electronic/electrical instruments and equipment used in zone "1" or zone "2" hazardous area as per the Regulation 107(2) of OMR 2017.
3. Successful bidder has to take approvals of the following from OIL:
   i. Control System cabinet Wiring Details
   ii. Transmitters/ Switches locations & installation plan
   iii. Loop diagram & loop details
   iv. Cable schedule
   v. Project Implementation Schedule
4. Test and calibration certificates for instruments have to be provided along with the supply.
5. The materials shall be packed in robust cartoons so as to avoid damage in transit
6. 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 he has to replaced/repair at his own cost.
7. 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.
8. Supply of all necessary accessories & fittings like-pipe, cable tray, Junction Box, Cable gland cable tie, nut bolt, screw, clamp, etc. required to complete the installation and commission is under the scope of bidders.
9. The PLC panel should be robust in construction and to be attached with proper stand to be fixed in site as per site requirement.

H. PUMP PACKAGE UNITISATION:

The pump set is to be supplied with all components and accessories fitted and mounted on a robust oilfield type three runner portable master skid. The floor of the skid should be covered with anti-skid steel plates. While unitizing the pump set, easy approach to various components should be kept in mind, to facilitate operational and maintenance requirements. The skid should be fabricated out of properly sizes beams to withstand loading / unloading and transfer in oil field trucks.

The skid shall be sized to contain the entire pump and motor unit and should include the following components:

a) Drip pan for cradle/fluid area of pump and packing area complete with threaded drain
b) Dip lip for cradle / fluid area of pump and packing area
c) Grouting holes
d) Horizontal adjustment screws for minor adjustment
e) Two grouting bosses on skid
f) Interconnection piping spool pieces on suction and discharge with ancillary components
g) Non sparking Aluminum safety guards.
h) One set of proper size foundation bolts and nuts ***(J type bolt)*** with each pump sets. The foundation Bolt & nut for the skid is to be in accordance with ASTM #A193 B7 Standard.

N.B.:

The unitization process shall also include following:

a) Painting of skid, pump, piping and other accessories.

Paint / finish specifications shall consist of wire brushing structural pieces and piping, solvent cleaning of components, one coat of red oxide alkyd primer 2.0 to 2.5 mils dry film thickness (50 – 130 micron). The top coat shall be one coat of gloss sky blue national enamel 1.0 to 2.0 mils dry film thickness.

b) Supply and erection of suction stabiliser, Discharge dampener, Safety/ Pressure Relief Valve, pressure gauges, inlet & outlet ball valves, check valves drain valve, Bypass valve and pipes and pipe fittings.

I. INSPECTION & TESTING

i) The bidder shall ensure that the material to be supplied against this order shall be individually inspected, tested and analysed in terms of the specifications attached to the order and the relevant codes and practices specified therein by expression or implication.

ii) The pump set shall be inspected by OIL's deputed engineer(s) or any other individual/agency authorised by OIL for the purpose of inspection at manufacturers / assembler's works / factory prior to dispatch. However, such inspection will not relieve the supplier of his responsibility to ensure that the equipment supplied conforms to the correct specifications and is free from manufacturing and all other defects.
The supplier shall carry out full load performance test on the pump set, at duty conditions, in the presence of OIL's deputed representative(s).
The supplier has to run the Prime Mover (gas engine) in PNG or CNG which is available at test facility for full load test of the Pump set. If at all, Fuel gas is not available at test facility, the pump set has to be load test by suitable capacity motor with full load. After the load test, the pump set need to be re-assembled with gas engine with proper alignment and photographic evident for the same will be shared with OIL.
Supplier has to provide the load test certificate of the engine provided by the engine Manufacturer/ Authorised Dealer or supplier of the Gas engine.
Despatch clearance will be issued after verification of all the details of the Pump sets only.

iii) If the Gas engine can't be load tested during the inspection, the supplier has to give an undertaking that if the engine is fail to perform at site as per pumping requirement, the same will be replaced or rectified without any cost to OIL.

iv) The supplier shall make available to OIL or any other individual/agency authorised by OIL for the purpose of inspection, all its records and results in respect of inspection.

v) For false calls for inspection and for the cases where material is rejected on inspection, the successful bidder will bear the actual cost of inspection incurred/suffered by OIL.

vi) The inspection by OIL or by OIL's representative in any manner does not absolve the successful bidder of any liability and/or responsibility under the purchase order.

N.B.:

The QAP (Quality Assurance Plan) for the Pump sets shall have to be submitted to OIL for approval prior to Pre-despatch inspection at supplier's works.

Charges for carrying out the above tests at the manufacturer's facility should be included in the purview of the offer. However, cost of travelling, boarding, lodging of OIL's engineers will be to OIL's account.

A draft copy of the composite operation manual of the complete pump packages including control panel shall be submitted to representative of OIL during pre-despatch Inspection at supplier's works for approval. The approved copy of the composite manual shall to be supplied along with the documents as mentioned under Clause 13-IV.

J. FACTORY ACCEPTANCE TEST (FAT)

The bidder will have to submit final GA drawing including all the technical details, factory acceptance test procedure (or Quality Assurance Plan) and inspection plan to OIL for approval. OIL will depute engineer(s) to witness the complete functions and operation of the all the items of the system at one workplace. The acceptance of the system will be signed by OIL representatives at that work place after final successful functional test and demonstration.

Unless otherwise specifically authorized by OIL in writing, the successful bidder shall not ship or dispatch for any material under the purchase order before Inspection.

K. TRAINING

a) The bidder shall provide comprehensive training to a group of OIL's engineers at their manufacturing plant/works for a period of 5 days (approx.) on Operation & Maintenance, Troubleshooting of the system. The training is to be supplemented by manual in hard bound copy.

b) After successful installation and commissioning the bidder needs to provide detailed onsite operation and maintenance training to OIL personnel for minimum two days duration.

L. INSTALLATION & COMMISSIONING:

a) Installation & Commissioning of the Pump set shall be carried out by the bidder in the presence of OIL's representatives at its fields in and around Duliajan, Assam (India). Services of qualified and competent personnel from equipment manufacturer are must during installation & commissioning of the pump sets. Only competent service personnel shall be engaged for installation, testing and commissioning of pump sets. OIL will provide necessary statutory permits in classified areas as and when required.

b) Installation and Commissioning charges must be quoted separately (should not be clubbed together with main equipment) on lump sum basis which shall be considered for evaluation of the offers. These charges should include to and fro fares, boarding/ lodging, local transportation and other expenses of the commissioning engineers during their stay at Duliajan, Assam (India). All Taxes towards the services provided by the supplier

shall be borne by the supplier and will be deducted at source. Bidders should also confirm about installation/ commissioning in the Technical Bid.

c) The successful bidder shall install all the hardware i.e. Transmitter, cable laying, fixing of cable trays, cable termination, fixing of Instrumentation System for CODP along with power supply and hooter etc.

d) The successful bidder should design and submit the complete cable schedule for OIL's approval prior to execution of the job.

M. SITE ACCEPTANCE TEST (SAT)

a) OIL shall take over the system from bidder after successful completion of SAT. SAT shall be started only after satisfactory performance of loop checking and verification of records.

b) Site acceptance tests shall be carried out in presence of OIL's representative.

c) Bidder shall carry out following tests as minimum as part of SAT

- Hardware verification as per final Bill of material.
- Visual & Mechanical inspection for proper workmanship, identification, wiring, ferruling, name plates etc.
- System configuration as per approved configuration diagram / scheme.
- Demonstration of all system diagnostics.
- Testing of all operational functionalities including pre-alarm and alarm logic function.
- System performance test.

d) OIL will finally test for successful uninterrupted operation of the integrated system for the duration of minimum 72 hours for the system. Bidder's personnel shall be present during the test. Any malfunctioning of the system components shall be rectified free of cost. Once the system failure is detected, the test shall start all over again from the beginning. On satisfactory performance, the pumps set shall be subsequently handed over to OIL and will be declared as commissioned. The warranty period shall start from the day OIL takes over the system.

N. WARRANTY:

The equipment/materials will be guaranteed for a period of 18 (eighteen) months from the date of receipt of the material at OIL's depot or 12(twelve) months from the date of commissioning whichever is earlier. The supplier shall repair or replace any item or equipment found defective in materials or workmanship or performance within the above period free of charge. The warranty is applicable to bought out items and system software also. Any system/ software fault during warranty period, supplier has to attend within 48-hours after receiving of calls from OIL free of charges.

O. SPARE PARTS AND SPECIAL TOOLS:

a. Bidders have to provide the price, along with the part numbers, of the following spares that we envisage shall be required for maintenance of the pump set for 2 (two) years. The prices of these spares shall be considered during commercial evaluation of the offer.

SPARES FOR TRIPLEX PLUNGER PUMP:

i. SUCTION VALVE ASSEMBLY : 3 NOS PER PUMP
ii. DELIVERY VALVE ASSEMBLY : 3 NOS PER PUMP
iii. VALVE COVER GASKET : 12 NOS PER PUMP
iv. VALVE SEAT (SUCTION) : 3 NOS PER PUMP
v. VALVE SEAT (DELIVERY) : 3 NOS PER PUMP
vi. ROD WIPER : 6 SETS PER PUMP
vii. PLUNGER : 3 NOS PER PUMP
viii. PLUNGER PACKING : 6 SETS PER PUMP
(EACH SET ADEQUATE TO CATER FOR 3 PLUNGERS)
ix. CRANK PIN BEARING : 3 SETS PER PUMP

NOTE: All the above mentioned Pump spares (Under Clause J.) shall have to be packed separately with packing list and labeled with following
OIL's Purchase order No:_____
To,
Head- Field Engineering

OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

SPARES FOR GAS ENGINE:

i	SPARK PLUG	: 1 SET PER ENGINE
ii	IGNITION TRANSFORMER	: 1 SET PER ENGINE
iii	LUB OIL FILTER ELEMENT	: 6 NOS PER ENGINE
iv	SET OF VEE BELTS	: 2 SETS PER ENGINE
v	AIR FILTER ELEMENT	: 4 NOS PER ENGINE
vi	SET OF GASKETS	: 1 SET PER ENGINE

NOTE: All the above mentioned Gas Engine Spares (Under Clause J.) shall have to be packed separately with packing list and labeled with following
OIL's Purchase order No:_____
To,
Head- Field Engineering
OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

SPARES FOR INSTRUMENTATION SYSTEM:

Bidders have to provide the price, along with the part numbers, of the following Instruments spares that we envisage shall be required for trouble free maintenance of the control system for two years. The prices of these spares shall be considered during commercial evaluation of the offer.

1. Pump suction pressure transmitter-2nos
2. Pump discharge pressure transmitter-2nos.
3. Pump vibration switch-2nos.
4. Oil level switch (pump sump, gear box, engine)-2 nos each.
5. Engine oil pressure transmitter-2nos.
6. Engine water temperature transmitter-2 nos.
7. Engine speed transmitter-2nos.
8. Pick-up coil for turbine flowmeter-2nos.
9. Rtd for temperature measurement-2nos
10. Panel view-2no
11. Spares for plc based control system-1set.
(PLC, I/O card, Power Supply, Fuse, Isolators etc.)

NOTE: All the above mentioned Instruments spares (Under Clause J.) shall have to be packed separately with packing list and labeled with following:
OIL's Purchase order No:_____
To,
Head- Field Engineering
OIL INDIA LIMITED
DULIAJAN- 786602
ASSAM, INDIA

b. Bidders shall have to provide the unit price, along with the part numbers, of the following insurance spares. The cost of these spares shall however not to be considered during commercial evaluation of the offer.

TRIPLEX PLUNGER PUMP:

i.	Fluid end
ii	Stuffing box assembly
iii	Gland nut
iv	Extension rod
v	Crankshaft
vi	Cross head
vii	Connecting rod assembly

GAS ENGINE:

i. Cylinder head including head gasket
ii. Cylinder liner
iii. Piston assembly including piston rings
iv. Big end bearing set
v. Crankshaft
vi. Camshaft
vii. Governor
viii. Carburetor
ix. Altronic iii/v

c. The following special accessories/tools should be included [one set against each pump set] in the scope of supply, as commissioning spares. The prices of these spares shall be considered during commercial evaluation of the offer.

i. One set of each type and size of coupling installed in the pump set per pump set.
ii. A valve seat puller and special wrenches for tightening stuffing box glands, studs etc. per pump set.
iii. Companion Flanges for suction and discharge ends of each pump with gasket and fasteners per pump set.

d. RECOMMENDED SPARES

i. The bidder shall furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc. throughout the life of the equipment. Annual consumption of each spare should be furnished in a tabular format. 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 contact postal address of OEM for all items of the whole unit.
ii. 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.

P. AFTER SALES SERVICE:

The nature of after sales service, which can be offered by the bidder during initial commissioning and also subsequently should be clearly stated.

Bidders should also confirm that spares, both regular consumable ones as well as vital / insurance spares, for engine, pump and all accessories quoted, shall be available for at least 10 years after the delivery of the material.

Q. General Notes:

1.0 A system will be considered as successfully commissioned only after obtaining valid DGMS approval for all the constituent equipment/instruments of the system.

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

ANNEXURE – II

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

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

A. TECHNICAL

1.0 BIDDER'S ELIGIBILITY:

1.1 The offered pump should be a horizontal, single acting, triplex plunger pump conforming to API 674 standards/ American Hydraulic Institute (ANSI/HI) standards, suitable for meeting the delivery parameters (Volume and Pressure) mentioned in the tender.

*[**Note:** Speed of the pump (RPM of Pump crank shaft) should be as per API-674 standard.]*

1.2 The gas engine should be a four stroke, spark-ignited, stoichiometric (Air-Fuel Ratio), naturally aspirated or turbo-charged, radiator cooled engine, rated for continuous power in accordance with ISO 3046/BS5514/IS10000 standards and capable of developing a net BHP in the range as mentioned in the tender with limiting rpm 1500 and limiting compression ratio 12:1.

1.3 The bidder should be an OEM or authorized dealer of OEM of the pump or an OEM (of pump) recommended assembler of pump sets. In all cases, the bidder has to purchase the Engine from an OEM of Gas Engine or their Authorized Dealer. Undertaking from the bidder in this regard must be enclosed with the offer failing which the offer will be rejected.

1.4 If the bidder is an OEM (of pump) recommended assembler of pump sets, he must purchase the pump and the Gas Engine from OEM or their authorized dealer. Undertaking from the bidder in this regard must be enclosed with the offer failing which the offer will be rejected. The assembler should indicate that necessary infra-structural facilities for fabrication and load testing of the pump sets are available with them. Bidders other than the OEM must furnish the following undertaking from the OEM.

Date of manufacture, make, model, serial no., test certificate, literatures and parts book of the pump and also the operation & maintenance manual of pump will be submitted if order is placed on the bidder.

1.5 Bidder must have successfully supplied at least 02 (two) nos. continuous duty pump sets *(of capacity **25 KLPH** and above)* of **"similar nature"** in a single order, for water flood/formation water disposal/ hydrocarbon service applications in PSUs/Central Government Undertakings/Public Limited Companies in the Oil & Gas sector in the last 10(ten) years reckoned from the original bid closing date of the Tender. Copies of purchase orders from the clients indicating the supply of such equipment are to be submitted with the offer. The orders are to be further substantiated by satisfactory performance certificates from the customer.

Note:

(i) The bidder shall submit documentary evidence/details of the previous supply of such pump set in a tabular format along with the bid. The copy of such format is attached with the tender **(APPENDIX-I)**.

(ii) **"Similar nature"** pump means horizontal, single acting, triplex plunger pump conforming to API 674 standards/ American Hydraulic Institute (ANSI/HI) standards.

1.6 The model of pump offered as per tender (both Volume & pressure) should be one that has a proven track record for continuous duty water flood / formation water disposal / hydrocarbon service applications. The model should be one that has been successfully deployed for any of the continuous duty applications, viz: water flood / formation water disposal / hydrocarbon service, for a minimum period of 2400 hours. In this regard satisfactory performance certificate of the offered model pump from the end users shall to be enclosed along with the offer.

N.B.:

1. *"Continuous duty" means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application.*
2. *Hydrocarbon Service Application of continuous duty plunger pumps in the context of this tender refers to applications where such pumps are deployed for duties such as crude oil transfer, condensate injection, polymer injection, glycol injection etc. in the E & P Sector and also continuous duty handling of petroleum and petrochemical products in the Refining & Distribution Sector of the Oil & Gas Industry.*

1.7 The engine of the offered Pump set should have

(i) Proven track record for pump applications in PSUs/Central Government Undertakings/Public Limited Companies in the Oil & Gas sector.

(ii) Should have logged minimum 2400 hours or one year from its date of commissioning prior to the bid closing date of this tender. Documentary evidence in support of the engine running time shall be collected from the customer and same shall be submitted along with the Bid.

(iii) The bidder shall have to provide the undertaking that the offered engine shall develop required BHP to meet pump requirement suitably and its overall performance shall be satisfactory with the natural fuel gas composition as specified in this tender.

Note: Relevant documentary evidences from the end users in support of the three conditions mentioned above must be submitted by the bidder along with the offer.

2.0 **DELIVERY PERIOD**: **Delivery of all the items must be completed within 9(nine) months from the date of issue of Purchase order. The date of receipt of materials at site shall be considered as the date of delivery.**

Installation/Commissioning of the CODPs to be completed within 3 (three) months from the date of receipt of site clearance from OIL.

2.1 Bids submitted by Bidders quoting delivery period more than the above-mentioned duration shall not be accepted. Bidders must categorically confirm the delivery period in their Technical Bid.

B. BRC - FINANCIAL:

1.0 The bidder shall have an annual financial turnover of minimum **INR 3,25,80,000.00** during any of the preceding 3 (Three) financial/accounting years reckoned from the original bid closing date of the tender.

2.0 "Net Worth" of the bidder must be positive for the financial/accounting year just preceding to the original Bid Closing Date of the Tender.

3.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an affidavit/ undertaking **(PROFORMA - 1)** certifying that 'the balance sheet/Financial Statements for the financial year (as applicable) has actually not been audited so far'.

Note:

a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the technical 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 **(PROFORMA – 2)**

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.

4.0 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$.

5.0 In case the Bidder is subsidiary company (should be 100% owned subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits its bid based on the strength of parent/ultimate parent/holding company, then following documents need to be submitted:

(i) Turnover of the parent/ultimate parent/holding company should be in line with Para B (1.0) above.
(ii) Net Worth of the parent/ultimate parent/holding company should be positive in line with Para B (2.0) above
(iii) Corporate Guarantee **(PROFORMA - 3)** on parent/ultimate parent/holding company's company letter head signed by an authorized official undertaking that they would financially support their wholly owned subsidiary company for executing the project/job in case the same is awarded to them.

Documents to substantiate that the bidder is as 100% subsidiary of the parent/ultimate parent/holding company.

ANNEXURE - III

GENERAL NOTES TO BIDDERS

1.0 Bidders shall submit their offer mentioning pointwise compliance/noncompliance to all the terms & conditions, BEC/BRC, Specifications etc. Any deviation(s) from the tender terms & conditions, BEC/BRC, Specifications etc. should be clearly highlighted specifying justification in support of deviation.

2.0 The Bidder to submit following Technical Evaluation Sheet & Appendices along with technical bid -

Annexure -IV: Bid Evaluation Matrix (Bid Rejection Criteria)
Appendix – I: Documentary evidence / Supply Details for Single Acting Triplex Plunger Pump Set
Appendix – II: Technical Checklist
Appendix – III: Data Sheet

3.0 OIL shall be entering into an Integrity Pact, **if applicable** with the bidders as per format enclosed vide **PROFORMA - 4** 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 have 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:

Shri Sutanu Behuria, IAS (Retd.),
e-mail ID : *sutanu2911@gmail.com*

Shri Om Prakash Singh, IPS (Retd.),
Former DGP, Uttar Pradesh
e-mail: *Ops2020@rediffmail.com*

Shri Rudhra Gangadharan, IAS (Retd.),
Ex-Secretary, Ministry of Agriculture
e-mail id : *rudhra.gangadharan@gmail.com*

4.0 **MICRO AND SMALL ENTERPRISES (MSE)**:

Categorisation and various Criteria applicable to MSE bidders shall be guided by the Gazette Notification No. CG-DL-E-26062020-220191 dated 26.06.2020 and Amendment vide Gazette Notification no. CG-DL-E-16062021-227649 dated 16th June, 2021 issued by Ministry of MICRO, SMALL AND MEDIUM ENTERPRISES. The existing enterprises registered under EM- Part-II or UAM till 30th June, 2020 shall continue to be valid only for a period up to the 31st day of December, 2021.

The bidder claiming as MSE status (MSE-General, MSE-SCIST, MSE -Woman) against this tender has to submit the following documents for availing the benefits applicable to MSEs:

Udyam Registration Number with Udyam Registration Certificate.

OR

Proof of registration with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or Udyog Adhar registration or registration with any other body specified by Ministry of MSME.

Note: *In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur or Woman Entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur/ Woman Entrepreneurs should also be enclosed.*

5.0 **POLICY TO PROVIDE PURCHASE PREFERENCE (LINKED WITH LOCAL CONTENT) (PPLC):**

Bidders to note that Ministry of Petroleum & Natural Gas, Government of India implemented PPLC Policy to provide Purchase Preference (linked with local content) by notification no. Ref. FP-20013/2/2017-FP-PNG dtd. 17.11.2020 and its amendment issued from time to time. PP-LC Policy (including its latest modifications/amendments) as may be prevailing on the date of Price Bid Opening shall be applicable against this tender. Bidders are requested to go through the policy and take note of the following while submitting their offer.

1. Certification and Verification

   Class I/Class II Local suppliers are eligible to bid only if they meet the local content norms, therefore whether or not they want to avail PP-LC benefit, it will still be mandatory for them to give adequate documentation as follows to establish their status as class-I or class-II local supplier:

   (i) At bidding stage:

   a) Price Break-up:
   - The bidder shall provide the percentage of local content in the bid.

   b)
   - The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
   - In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practising chartered accountant (in respect of other than companies) giving the percentage of local content.
   - However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.

   (ii) After Contract Award

   - The bidder shall submit an undertaking from the authorised signatory of bidder having the power of Attorney alongwith the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract.
   - In cases of procurement for a value in excess of Rs 10 crores, the undertaking submitted by the bidder shall be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practising chartered accountant (in respect of other than companies) giving the percentage of local content.
   - However, in case of foreign bidder, certificate from the statutory auditor or cost auditor of their own office or subsidiary in India giving the percentage of local content is also acceptable. In case office or subsidiary in India does not exist or Indian office/ subsidiary is not required to appoint statutory auditor or cost auditor, certificate from practising cost accountant or practising chartered accountant giving the percentage of local content is also acceptable.

2. Each supplier shall provide the necessary local-content documentation to the statutory auditor, which shall review and determine that local content requirements have been met, and issue a local content certificate to that effect on behalf of procuring company, 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.

3. The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with each invoice while maintaining the overall % of local content for the total work/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.

4. 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.

5. The Procuring Company shall also have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

6.0 **Bidder to categorically confirm under which policy i.e. PP-LC or MSME, they want to avail the benefit and to submit requisite document/certificate in support to avail this benefit. The bids will be evaluated based on their declaration.**

7.0 Ministry of Finance of Govt. of India, Department of Expenditure, Public procurement Division vide office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020(order-Public Procurement no.1) has proclaimed the insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017 w.e.f. 23rd July, 2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India on the grounds of defence of India on matters directly or indirectly related thereto including national security. Bidders are requested to take note of the office memorandum and submit their offers accordingly, wherever applicable. In this regard, bidders must submit duly sealed & signed undertaking as per format provided vide, "**PROFORMA-5**" along with the technical bid.

8.0 **TAX COLLECTIBLE AT SOURCE (TCS):**

Tax Collectible at Source (TCS) applicable under the Income-tax Law and charged by the SUPPLIER shall also be payable by OIL along with consideration for procurement of goods/materials/ equipment. If TCS is collected by the SUPPLIER, a TCS certificate in prescribed Form shall be issued by the SUPPLIER to OIL within the statutory time limit.

Payment towards applicable TCS u/s 206C (IH) of Income Tax Act, 1961 will be made to the supplier provided they are claiming it in their invoice and on submission of following undertaking along with the invoice stating that:

a. TCS is applicable on supply of goods invoiced to OIL as turnover of the supplier in previous year was more than Rs. 10 Cr. and
b. Total supply of goods to OIL in FY …….. (As applicable) exceeds Rs. 50 Lakh and
c. TCS as charged in the invoice has already been deposited (duly indicating the details such as challan No. and date) or would be deposited with Exchequer on or before the due date and
d. TCS certificate as provided in the Income Tax Act will be issued to OIL in time.

However, Performance Security deposit will be released only after the TCS certificate for the amount of tax collected is provided to OIL. Supplier will extend the performance bank guarantee (PBG), wherever required, till the receipt of TCS certificate or else the same will be forfeited to the extent of amount of TCS, if all other conditions of Purchase order are fulfilled.

The above payment condition is applicable only for release of TCS amount charged by supplier u/s 206C (I H) of Income tax Act, 1961.

9.0 At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the tender Documents through issuance of Corrigendum(s)/Addendum(s). Bidders are expected to take the Corrigendum(s)/ Addendum(s) into account in preparation and submission of their bid. No separate intimation for Corrigendum(s)/Addendum(s) published by OIL shall be sent to the Bidders.

APPENDIX – I

ATTACHMENT TO BRC CLAUSE NO. 1.5

(Documentary evidence / Supply Details for Single Acting Triplex Plunger Pump Set)

Sl. No.	Client / customer Name and Address with contact e-mail id	Order No / Contract No.	Date of order	Pump specification: Make, Model, Capacity (Discharge in CUM /HR & Pressure in KSC of pump) & Quantity supplied	Completion date	Supporting document enclosed
1						
2						
3						
4						
5						
6						
7						
8						
9						

APPENDIX-II

TECHNICAL CHECKLIST

The Technical Check List must be completed and submitted 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/No/Not Applicable*** *to the following questions, in the right hand column*

1.	Whether quoted as OEM of Pump and whether documentary evidences submitted ?		
2.	Whether quoted as authorised dealer of Pump and whether documentary evidences submitted ?		
3.	Whether quoted as OEM recommended assembler of Pump sets and whether documentary evidences submitted ?		
4.	Whether the offered Pump is a horizontal, triplex plunger Pump conforming to API 674 standard /American Hydraulic institute (ANSI/HI) standards?		
5.	Whether the Pump is designed for continuous service duty ?		
6.	Whether the offered engine conforms to ISO3046 / BS 5514 / IS 10000 specifications ?		
7.	Whether the Minimum Net HP of the engine is as per NIT requirement ?		
8.	Whether the engine is rated for continuous power ?		
9.	Whether the engine is water cooled ?		
10.	Whether Instrumentation for CODP & Technical Specification for Instruments is as per NIT requirement ?		
11.	Whether Electronic Instruments placed on the pump side is approved by DGMS ?		
12.	Whether the speed reduction gear box is external foot-mounted ?		
13.	Whether the floor of the three runner skid shall be covered by checkered plates ?		
14.	Whether Flexible disc / grid member couplings have been incorporated in the transmission ?		
15.	Whether guards shall be provided over couplings and belt drives ?		
16.	Whether the two years spares for the packages indicated have been quoted ?		
17.	Whether special tools and commissioning spares have been included in the scope of supply ?		
18.	Whether spares shall be available for 10 years after supply of equipment?		
19.	Whether separately highlighted any deviation from the technical specifications ?		
20.	Whether the Pre-despatch inspection of the Pump packages shall include Full Load Performance test of the Pump Sets ?		
21.	Whether the bidder has submitted the undertaking that the offered materials of construction of the pump are suitable for the specified operating conditions (as		

	mentioned in the tender) and as required by API 674 Standard and the materials prohibited by the API 674 Standard are not used in the offered pump?		
22.	If the bidder is an OEM (pump) or authorized dealer of OEM of the pump or an OEM(pump) recommended assembler of pump sets, whether the bidder has submitted undertaking that bidder will purchase the engine from OEM of Engine or their authorized dealer?		
23.	If the bidder is an OEM (pump) recommended assembler of pump sets, whether the bidder has submitted undertaking that the bidder will purchase the Engine and the pump from OEM or their authorized dealer?		
24.	If the bidder is other than OEM of pump, whether the bidder has submitted undertaking from OEM that, Date of manufacture, make, model, serial no, test certificate, literatures and parts book of the pump will be supplied if order is placed on the bidder?		
25.	Whether the bidder has submitted undertaking that the offered engine shall develop required BHP to meet pump requirement suitably and it's overall performance shall be satisfactory with the natural fuel gas composition as specified in this tender?		
26.	Whether the bidder has submitted undertaking that in case the order is placed on the bidder, the pump packages will be supplied (including major component and all it's accessories), will be manufactured after the bid closing date of this tender?		

APPENDIX-III

DATA SHEET

DATA SHEET (ENGINE)		
1	Make	
2	Model	
3	Number of cylinders	
4	Aspiration	
5	Compression ratio	
6	Size (bore x stroke)	
7	Displacement	
8	Rated speed	
9	Duty	
10	Gross hp at rated rpm	
11	Deduction for fan, altitude , temperature	
12	Nett hp available at 1500 rpm	
13	Specific fuel consumption at # 110% load # 100% load # 75% load # 50% load	
14	Lubricating oil consumption (lt / hr)	
15	Engine sump capacity (lts)	
16	Engine radiator capacity (lts)	
17	Make and type of governor	
18	Make of clutch PTO	
19	Model of clutch PTO	
20	Make of starter	
21	Make and model of coupling between clutch PTO and gearbox	

DATA SHEET (PUMP)		
1	Make	
2	Model	
3	Size (plunger diameter x stroke length)	
4	Limiting pressure and volume at offered size	
5	Offered speed	
6	Limiting speed as per relevant standard	
7	Discharge volume @ offered speed (η vol = 95%)	
8	HP requirement as per NIT parameters	
9	Make and model of external gear box	
10	Gear ratio of external foot mounted gear box	
11	Type and size of coupling between Engine shaft and gear box input shaft	
12	Type and size of coupling between gear box output shaft and triplex pump input shaft	

ANNEXURE – IV

ANNEXURE – V

BID EVALUATION MATRIX (BID EVALUATION CRITERIA/BID REJECTION CRITERIA) *(TO BE FILLED IN BY BIDDER DULY SIGNED)*			
BID EVALUATION CRITERIA			
Clause Number	**DESCRIPTION**	**BIDDER'S RESPONSE (Complied / Not Complied /Deviation/Not Applicable)**	**TO BE FILLED BY THE BIDDER** **Relevant Location of their Bid to support the remarks / compliance** **(Reference of Document name / Serial number / Page number of bid for documentary evidence)**
A.1.0	**BIDDER'S ELIGIBILITY**		
A.1.1	The offered pump should be a horizontal, single acting, triplex plunger pump conforming to API 674 standards/ American Hydraulic Institute (ANSI/HI) standards, suitable for meeting the delivery parameters (Volume and Pressure) mentioned in the tender.*[Note: Speed of the pump (RPM of Pump crank shaft) should be as per API-674 standard.*		
A.1.2	The gas engine should be a four stroke, spark-ignited, stoichiometric (Air-Fuel Ratio), naturally aspirated or turbo-charged, radiator cooled engine, rated for continuous power in accordance with ISO 3046/BS5514/IS10000 standards and capable of developing a net BHP in the range as mentioned in the tender with limiting rpm 1500 and limiting compression ratio 12:1.		
A.1.3	The bidder should be an OEM or authorized dealer of OEM of the pump or an OEM (of pump) recommended assembler of pump sets. In all cases the bidder has to purchase the Engine from an OEM of Gas Engine or their Authorized Dealer. Undertaking from the bidder in this regard must be enclosed with the offer failing which the offer will be rejected.		

A.1.4	If the bidder is an OEM (of pump) recommended assembler of pump sets, he must purchase the pump and the Gas Engine from OEM or their authorized dealer. Undertaking from the bidder in this regard must be enclosed with the offer failing which the offer will be rejected. The assembler should indicate that necessary infra structural facilities for fabrication and load testing of the pump sets are available with them. Bidders other than the OEM must furnish the following undertaking from the OEM. Date of manufacture, make, model, serial no, test certificate, literatures and parts book of the pump and also the operation & maintenance manual of pump will be supplied if order is placed on the bidder.		
A.1.5	Bidder must have successfully supplied at least 02 (two) nos. continuous duty pump sets *(of capacity **25 KLPH** and above)* of **"similar nature"** in a single order, for water flood/formation water disposal/ hydrocarbon service applications in PSUs/Central Government Undertakings/Public Limited Companies in the Oil & Gas sector in the last 10(ten) years reckoned from the original bid closing date of the Tender. Copies of purchase orders from the clients indicating the supply of such equipment are to be submitted with the offer. The orders are to be further substantiated by satisfactory performance certificates from the customer. **Note**: (i) The bidder shall submit documentary evidence/details of the previous supply of such pump set in a tabular format along with the bid. The copy of such format is attached with the tender **(APPENDIX-I)**. (ii) **"Similar nature"** pump means horizontal, single acting, triplex plunger pump conforming to API 674 standards/ American Hydraulic Institute (ANSI/HI) standards.		
A.1.6	The model of pump offered as per tender (both Volume & pressure) should be one that has a proven track record for continuous duty water flood / formation water disposal / hydrocarbon service applications. The model should be one that has been successfully deployed for any of the continuous duty applications, viz: water flood / formation water disposal / hydrocarbon service, for a minimum period of 2400 hours. In this regard satisfactory performance certificate of the offered model pump from the end users shall to be enclosed along with the offer. **N.B.**:		

	1. *"Continuous duty" means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application.* 2. *Hydrocarbon Service Application of continuous duty plunger pumps in the context of this tender refers to applications where such pumps are deployed for duties such as crude oil transfer, condensate injection, polymer injection, glycol injection etc. in the E & P Sector and also continuous duty handling of petroleum and petrochemical products in the Refining & Distribution Sector of the Oil & Gas Industry.*		
A.1.7	The engine of the offered Pump set should have (iv) Proven track record for pump applications in PSUs/Central Government Undertakings/Public Limited Companies in the Oil & Gas sector. (v) Should have logged minimum 2400 hours or one year from its date of commissioning prior to the bid closing date of this tender. Documentary evidence in support of the engine running time shall be collected from the customer and same shall be submitted along with the Bid. (vi) The bidder shall have to provide the undertaking that the offered engine shall develop required BHP to meet pump requirement suitably and its overall performance shall be satisfactory with the natural fuel gas composition as specified in this tender. **Note:** Relevant documentary evidences from the end users in support of the three conditions mentioned above must be submitted by the bidder along with the offer.		
2.0	**DELIVERY PERIOD**: **Delivery of all the items must be completed within 9(nine) months from the date of issue of Purchase order. The date of receipt of materials at site shall be considered as the date of delivery.** **Installation/Commissioning of the CODPs to be completed within 3 (three) months from the date of receipt of site clearance from OIL.**		
B	**BRC - FINANCIAL:**		
1.0	The bidder shall have an annual financial turnover of minimum **INR 3,25,80,000.00** during any of the preceding 3 (Three) financial/accounting years reckoned from the original bid closing date of the tender.		

2.0	"Net Worth" of the bidder must be positive for the financial/accounting year just preceding to the original Bid Closing Date of the Tender.		
3.0	Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an affidavit/ undertaking **(PROFORMA - 1)** certifying that 'the balance sheet/Financial Statements for the financial year (as applicable) has actually not been audited so far'. **Note:** a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the technical 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 **(PROFORMA – 2)** OR ii) Audited Balance Sheet alongwith 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.		
4.0	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$.		

5.0	In case the Bidder is subsidiary company (should be 100% owned subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits its bid based on the strength of parent/ultimate parent/holding company, then following documents need to be submitted: (i) Turnover of the parent/ultimate parent/holding company should be in line with Para B (1.0) above. (ii) Net Worth of the parent/ultimate parent/holding company should be positive in line with Para B (2.0) above (iii) Corporate Guarantee **(PROFORMA - 3)** on parent/ultimate parent/ holding company's company letter head signed by an authorized official undertaking that they would financially support their wholly owned subsidiary company for executing the project/job in case the same is awarded to them. (iv) Documents to substantiate that the bidder is as 100% subsidiary of the parent/ultimate parent/holding company.		

PROFORMA – 1

(ON THE OFFICIAL PAD OF THE BIDDER TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER)

Certificate of Compliance of Financial Criteria

Ref: Financial Criteria of the BEC

I ……..…… the authorized signatory(s) of …… (Company or firm name with address) do hereby solemnly affirm and declare as under:-

The balance sheet/Financial Statements for the financial year _____ (as the case may be) has actually not been audited as on the Original Bid closing Date.

Place :…….

Date :…… Signature of the authorized signatory

Note: *Please note that any declaration having date after the **Bid closing Date** will not be considered and will be rejected. This certificate are to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.*

PROFORMA – 2

CERTIFICATE OF ANNUAL TURNOVER & NETWORTH

TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

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

YEAR	TURNOVER In INR (Rs.) Crores/ USD Million*	NET WORTH In INR (Rs.) Crores / USD Million*

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

Place:
Date:

Seal:

Membership No.:
Registration Code:
UDIN:

Signature:

PROFORMA – 3

PARENT/ ULTIMATE PARENT/ HOLDING COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING (Delete whichever not applicable)
(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at ..... this ..... day of ..... by M/s .....(mention complete name) a company duly organized and existing under the laws of ..... (insert jurisdiction/country), having its Registered Office at.....herein after called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their Tender No…… for……and M/s……..(Bidder) intends to bid against the said tender and desires to have Financial support of M/s…… [Parent / Ultimate Parent/Holding Company(Delete whichever not applicable)] and whereas Parent/Ultimate Parent/Holding Company(Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

1. The Guarantor confirms that the Bidder is a 100% subsidiary of the Guarantor.
2. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
3. The Guarantor have an annual financial turnover of minimum INR…….. Cr or USD …….. during any of the preceding 03(three) financial/ accounting years reckoned from the original bid closing date.
4. Net worth of the Guarantor is positive for preceding financial/ accounting year.
5. The Guarantor undertakes to provide financial support to the Bidder for executing the project/job, in case the same is awarded to the Bidder.
6. The Guarantor represents that:
   (a) this Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to the Bidder.
   (b) the liability of the Guarantor, under the Guarantee, is limited to the 100% of the order value between the Bidder and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.
   (c) this Guarantee has been issued after due observance of the appropriate laws in force in India.
   (d) this Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of New Delhi, India.
   (e) this Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.
   (f) the Guarantor has the legal capacity, power and authority to issue this Guarantee and that giving of this Guarantee and the performance and observations of the obligations hereunder do not contravene any existing laws.

for and on behalf of (Parent/Ultimate Parent/ Holding Company) (Delete whichever not applicable) Witness: 1. 2.	for and on behalf of (Bidder) Witness: 1. 2.

PROFORMA – 4

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"
And
(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble:
The Principal intends to award, under laid down organizational procedures, contract/s for **Tender No. ……..**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.

T. R. DUTTA

…….. **……..**

For the Principal **For the Bidder/Contractor**

Witness 1: .....

Witness 2: .....

Place: Duliajan

Date:

PROFORMA - 5

Format for Undertaking by Bidders towards compliance of office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020 (Public Procurement no. 1) issued by Department of Expenditure, Ministry of Finance, Govt. of India

(To be typed on the letter head of the bidder)

Ref. No_____ **Date:_____**

Tender No. _____Date:_____

OIL INDIA LIMITED
MATERIALS DEPARTMENT,
DULIAJAN, ASSAM, INDIA

Dear Sirs,

We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; We certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. We hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where evidence of valid registration by the Competent Authority shall be attached.]"

We also agree that, during any stage of the tender/contract agreement, in case the above information/documents submitted by us are found to be false, Oil India Limited has the right to immediately reject our bid/terminate contract at any stage and carry out further legal action on us in accordance with law.

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

Signature of Authorised Signatory
Name :
Designation :
Phone No.
Place :
Date :
(Affix Seal of the Organization here, if applicable)
Note : This form should be returned along with offer duly signed.