

**TERMS OF REFERENCE (TOR)
FOR
HIRING OF JET PUMP ON RENTAL
BASIS**



**TENDER ENQUIRY # PROC-
SERVICES/CB/PE&FD-4456/2019**

SCOPE OF WORK

1. General Introduction & Scope of Supply.

- 1.1. OGDCL intends to hire the services of an experienced and well reputed contractor for provision and operation of Gas Engine driven surface units (200 HP) on rental basis for Jet Pump operation to be installed on the OGDCL candidate wells where all down hole and wellhead installations are available. The contractor will be responsible for provision of smooth, continuous and un-interrupted 24x7 operation of Surface units.
- 1.2. The prospective bidder will have to provide surface units for jet pump operation for following locations and shall comprises of Power Skid and Vessel Skid. The generic PFD for power unit and vessel is attached with this document for reference please.

Sr. #	Well	Field	Qty	
1	Kunnar-09	Kunnar	District Hyderabad, Sindh Province.	1
2	Kunnar-10	Kunnar	District Hyderabad, Sindh Province.	1
3	Kunnar-12	Kunnar	District Hyderabad, Sindh Province.	1
4	Thora-01	Tando Alam Oil Complex	District Hyderabad, Sindh Province.	1
5	Lashari Center-05	Tando Alam Oil Complex	District Hyderabad, Sindh Province.	1
6	Pasakhi-02	Tando Alam Oil Complex	District Hyderabad, Sindh Province.	1
TOTAL				6

- 1.3. OGDCL reserve the right to reduce/increase the quantity of surface units/wells upon award of contract or after award of contract.
- 1.4. OGDCL reserve the right to change the well where the surface unit to be installed at the time of award of contract or later on depending on the current situation of well.
- 1.5. OGDCL reserve the right to hire complete or part of surface unit for any well as per financial bid format.
- 1.6. If OGDCL decide to suspend the operation of any candidate well and decide to shift/operate the surface unit for jet pump operation on another well, then bidder will be liable to do so on OGDCL request.
- 1.7. In such case bidder may claim the Inter well/field mobilization charges only if the physical location of surface unit has changed upto 50 km.
- 1.8. If the distance between sites is more than 50 km then OGDCL will do the loading/unloading and transportation and no charges will be paid to bidder/contractor.
- 1.9. OGDCL reserve the right mobilize the unit by using its own logistic arrangement. In such case no charges will be paid to bidder/contractor.
- 1.10. If the unit remained stationed on same place physically and switching of well is carried out by interchanging of connection/valve arrangement etc, then no charges will be paid to bidder/contractor.

2. Contractors Responsibility

- 2.1. The contractor has to supply gas engine driven surface units (for jet pump operation) on rental basis along with operation & maintenance. Rental of the units shall include all the services and material.
- 2.2. The J/P surface units shall comprises of Power Skid and Vessel Skid. The generic PFD for power unit and vessel is attached with this document for reference please.
- 2.3. The Power Skid be comprises of gas engine, triplex/multiplex pump (200 HP), cyclone separators, charge pump, plunger lubrication system, corrosion and scale inhibition

- system, pulsation dampener at pump outlet, gas scrubber, gas volume bottle, control panel and other allied facilities etc.
- 2.4. The Pump should be of 200HP capacity and having capability of delivering about 3150 BPD flow rate along with 3350 psi delivery pressure.
 - 2.5. Gas engine should have enough power to drive the 200 HP pump even in de-rated condition.
 - 2.6. The control panel should have capability of start/stop the unit along with monitoring devices for engine and pump and also tell the pump flow rate and discharge pressure.
 - 2.7. The vessel skid should be a single vessel type with minimum capacity of 50 bbl and designed for working pressure range of 20 to 240 psi at 200 F temperature along with allied accessories.
 - 2.8. The vessel skid/unit should hold up level of 50% each for produced oil and produced water, out of total liquid hold up for optimized storage of both fluids. There should be such arrangement on the vessel skid to use both fluids as power fluid (to be injected into well through pump).
 - 2.9. The tentative specification of produced oil & water to be used as power fluid is attached in this document.
 - 2.10. Contractor to depute qualified/experienced operational staff (24x7 hours) for each unit. At least one operator per unit is required for operation.
 - 2.11. Contractor is responsible for routine/scheduled/predictive & breakdown maintenance and troubleshooting of supplied rental surface units with material & services.
 - 2.12. Contractor is required to maintain the stock of consumable and other necessary spares for routine/scheduled/predictive & break down maintenance at OGDCL respective location to cope up any situation to minimize the downtime.
 - 2.13. The successful contractor shall maintain the surface units at optimum level before shifting to OGDCL site. The documentary proof of last overhauling and maintenance record to be provided.
 - 2.14. OGDCL reserves the right to visit the contractor site for inspection of surface units prior to shifting to OGDCL site.
 - 2.15. The OEM name plate and regulatory stamps of the equipment should be mounted on the each equipment. These must be clearly visible & readable.
 - 2.16. The surface units should be equipped with all the standard accessories/safeties.
 - 2.17. The contractor is responsible to provide all necessary tools/accessories to their manpower for routine checkups.
 - 2.18. The contractor operational staff shall be responsible for regular filling of log books issued for surface units. The log book must be signed by Incharge Operation/Maintenance of the respective field/location.
 - 2.19. The contractor will assure the presence of workshop manual, maintenance manual, maintenance and performance reports and other necessary data at site.

3. Delivery Time.

- 3.1. The delivery period for supply of surface units to OGDCL site is 60 calendar days (at maximum) from the date of issuance of service order/signing of contract.
- 3.2. If the contractor fails to provide surface units within 60 calendar days from signing date of the contract, OGDCL reserves the right to cancel/terminate the contract without intimation and forfeit the performance bank guarantee.

4. Installation & Commissioning.

- 4.1. The installation & commissioning activities time line is 15 calendar days after the surface units reach at site.
- 4.2. If the contractor fails to commission surface units within 15 calendar days of the mobilization at site, penalty will be imposed for each day delay equivalent to daily rental (calculated on the basis of contracted monthly rental) which will be deducted from his invoice or performance bank guarantee.

- 4.3. If the contractor fails to commission surface units within 30 calendar days of the mobilization, OGDCL reserves the right to cancel/terminate the whole or part of contract and may forfeit the performance bank guarantee.
- 4.4. The contractor is responsible for mobilization, installation and commissioning of surface units at site.
- 4.5. The interconnection piping with wellhead and available infrastructure is the responsibility of contractor.
- 4.6. The interconnection piping of power and vessel skid is the responsibility of contractor.
- 4.7. All necessary checks, arrangements and commissioning of the surface units are the responsibility of the contractor.
- 4.8. The fuel gas is available at some locations. The contractor has to make arrangements for making connections with the fuel supply line.
- 4.9. For wells where fuel gas supply is not available, the units to be run on well produced gas. The initial start-up gas arrangement (gas volume tank etc) for unit is the responsibility of contractor.
- 4.10. Installation of gas regulator/gas scrubber or any infrastructure (if required) will also be on part of the contractor.
- 4.11. The successful bidder will have to verify its offered capacity (pressure & flow rating, capacities etc.) of surface units at site during commissioning.

5. Operation

- 5.1. Contractor is fully responsible to provide continuous operation 24x7 days of week during the entire contract period.
- 5.2. Nothing except natural gas having pressure upto 100 psig (max.) where available will be provided by OGDCL for operation as fuel. The fuel gas specification/range is attached.
- 5.3. For wells where fuel gas supply is not available, the units to be run on well's produced gas. The start-up gas arrangement (gas volume tank etc) for unit is the responsibility of contractor.
- 5.4. All other requirements like Lube Oil, filters, batteries, battery electrolyte, radiator/cooling tower coolant and/or any other requirement to be fulfilled by the contractor at its own cost.
- 5.5. Contractor is fully responsible for trouble free operation, maintenance and routine checkups of the surface units during the contract period.
- 5.6. All types of maintenance of surface units will be the sole responsibility of the contractor in respect of spare parts, material, manpower, allied services & support and all other requirements.
- 5.7. Contractor is responsible to depute his operational staff for surface units operation & maintenance.
- 5.8. Contractor is responsible to provide all required PPE'S to his operational staff.
- 5.9. The contractor is responsible to arrange alternative crew member in case of absence of any crew member due to sickness, leave, domestic or any other reason.

6. Terms & Conditions

- 6.1. No down time is allowed and contractor is liable to provide smooth, continuous operation except total of 12 hrs per month for routine/periodic/preventive maintenance.
- 6.2. Contractor to arrange its replacement if any of the installed surface unit require to be shifted for any type of scheduled overhauling.
- 6.3. In case of failure or stoppage leading to shut down of surface unit due to malfunctioning, following penalties will be imposed.
- 6.4. In an event, the unit shut down prolongs more than 12 hours upto 24 hours per month, contractor will be liable to pay penalty on proportional rental basis which will be deducted from monthly rental.

- 6.5. In an event, the unit shut down prolongs more than 24 hours upto 72 hours per month, the contractor will be liable to pay penalty on proportional rental basis plus 15% of monthly rental charges.
- 6.6. In an event, the unit shut down prolongs more than 72 hours per month, the contractor will be liable to pay penalty equal to monthly rental, and hence no monthly rental will be paid in this particular month. However contractor is required to replace / repair the equipment in stipulated time, failure to which OGDCL reserve the right to de-hiring of such equipment alone or termination of entire contract as deemed necessary be OGDCL.
- 6.7. OGDCL will only provide accommodation to the contractor's crew (O&M) for a maximum of 15 persons at site(s). All other expenses of contractor's crew including meals, transportation etc will be on the part of contractor.
- 6.8. Charges of any damage caused to any OGDCL equipment / appliances due to malfunctioning of the surface unit will be charged from contractor.
- 6.9. OGDCL will not be responsible for any damage caused to surface units and/or contractor employees under any circumstances.

7. Contractor's Crew

- 7.1. The contractor shall have to provide tentative details of its crew who shall be appointed for this rental O&M job throughout the contract period with prior one month's notice to each location in charge / field location. The crew members must have the knowledge of operation & maintenance of equipment and should have hands on experience. The location Incharge will have to make the security clearance of nominated operators. The contractor has to change any or all of its crew members/operators whose performance is found unsatisfactory or involved in any illegal activities.

8. Company/Bidder Qualifying Criteria.

- 8.1. The contractors who intend to participate must provide documentary proof for at least 05 years of surface pumping units installation & operation experience. Further the contractor should submit a list of projects of similar nature carried out by him with brief scope of work along the technical portion of the bid for similar surface pumping units.
- 8.2. The bidder is to provide the following data/documents for evaluation/qualification along with technical bid:
 - 8.2.1 Certificate of incorporation.
 - 8.2.2 Company profile.
 - 8.2.3 Core business.
 - 8.2.4 Comprehensive list of rental surface units available for operations
 - 8.2.5 Last 05 years of continuous operations record for reference
 - 8.2.6 List of previous contract for Operation & Maintenance of surface pumping units with E&P/service companies operating in Pakistan & abroad during last 5 years. Bidder to provide contract copies in this regard.
 - 8.2.7 Performance Certificates (at least 3) from respective companies for current & previous rental contracts.
 - 8.2.8 Company financial standing & audited financial reports for last 3-years.
 - 8.2.9 List of all the workshops and service agencies across Pakistan.
 - 8.2.10 HSEQ policy of the company.
- 8.3. In case of joint venture, copy of contract should be provided in technical bid. In JV scenario, any commitment/letter from JV will be considered and the commitment/letter from individual company will not be entertained.
- 8.4. The contractor is to confirm that operator would be provided with adequate PPE's including overalls, ear muffs, safety shoes, safety helmets, safety goggles, safety gloves Bidder to provide J/P surface units specifications including make, model, rating and related information with bid.

9. Pre-Bid Meeting

- 9.1. A pre-bid meeting will be scheduled before submission of tender document to clarify the queries of bidders if required or on the request of any bidder(s). However, request for pre-bid meeting shall be made in writing Two (02) weeks before bid submission/opening date.

10. Contract Period

- 10.1. The rental contract will be for a period of one year and is extendable.
- 10.2. Contract signing date/service order issuance date will be considered for delivery period, Installation & commissioning. The effective time of one year will be started upon successful commissioning of Surface units.

11. Payment Term

- 11.1. Contractor has to submit monthly rental invoice of the preceding month to OGDCL on the last date of every month to the location Incharge along with signed log books.
- 11.2. The monthly rental will include the cost of equipment rent, crew rate/cost, maintenance cost and any other related cost regarding operation & maintenance of provided equipment. OGDCL will not pay any cost other than rental charges in lieu of operation & maintenance of equipment.
- 11.3. Rental charges will be started from the time of satisfactory commissioning of surface unit at site.
- 11.4. In case of unit remain shut-down / stand-by due to any OGDCL operational activity, then the standby charges of surface unit will be applied for that period. Contractor to quote its standby charges in its bid which shall be not more than 50% of regular rental charges.
- 11.5. The rental charges and stand-by charges will be paid according to actual operation and stand-by time proportionally.
- 11.6. The reverse-out and running-in of jet pump will be considered as routine operation.
- 11.7. The deductions & penalties, if any will be incorporated before payment of monthly rental invoice.
- 11.8. Payment will be made after deduction of applicable taxes against invoices.
- 11.9. The prices quoted by bidder in financial bid should be in US\$. The quoted price should be fixed/firm and are inclusive of all applicable taxes, duties and Levies etc. except Provincial Sales Tax/ICT Tax on Services which shall be paid/refunded by OGDCL at actual.
- 11.10. The payments to the Service Company will be made through cross Cheque in 100% Pak Rupees, at actual, against verified invoices at official exchange rate prevalent on the date of payment.

12. Bid Bond:

- 12.1. Bid Bond/Bid Security amounting to **USD 80,000/-** (US Dollars Eighty Thousand Only) is to be attached/provided with **technical bid**. Please see Master Set of Tender Document for further details

13. Bidding Method:

- 13.1. Bids against this tender are invited on “**Single Stage Two Envelope Bidding Procedure**” through press tendering, therefore, the bidders shall submit original and copy of their Technical and one original financial bid.

Note: The Master Set of Tender Documents for Services uploaded on OGDCL’s website (www.ogdcl.com) is the integral part of this TOR

14. Financial Bid Format

Sr. #	Description	Rate Basis	Rate
1	Rental Charges for Power Skid / Unit (gas engine driven)	Monthly per unit	
2	Rental Charges for Vessel Skid / Unit	Monthly per unit	
3	Stand-by Charges (for Pumping unit)	Monthly per unit	
4	Stand-by Charges (for Vessel unit)	Monthly per unit	
5	Installation & Commissioning	Lump sum per unit	
6	Mobilization Charges	Lump sum per unit	
7	De-mobilization Charges.	Lump sum per unit	
8	Inter well/field mobilization	Lump sum per unit (upto 50 km)	

15. Evaluation Criteria:

- 15.1. Financial Evaluation will be done on the basis of complete package wise for contract period and inclusive of monthly rental rates, Mob-demob, installation & commissioning etc. or any other related cost which effect the total contract period cost. "Stand-by" charges and "inter well/field mobilization" charges shall not be considered in evaluation.
- 15.2. The monthly rental will include the cost of equipment rent, crew rate/cost, maintenance cost and any other related cost regarding operation & maintenance of provided equipment. OGDCL will not pay any cost other than rental charges in lieu of operation & maintenance of equipment.
- 15.3. The rental charges and stand-by charges will be paid according to actual operation and stand-by time.
- 15.4. Bidder to quote the monthly rental rates inclusive of all applicable taxes & levies as per Government of Pakistan regulations except provincial sales tax on services. If taxes are not separately mentioned in financial bid, the quoted rates will be considered inclusive of all applicable taxes except provincial sales tax on services.
- 15.5. Any other/fixed cost (Mob/De-mob, installation, commissioning etc) will be entertained separately from monthly rental. Bidder to quote accordingly.
- 15.6. The installation & commissioning charges are for those operation/responsibilities covered in the section of Installation & Commissioning.
- 15.7. Prices should be firm without any adjusting formula.
- 15.8. Priced sheet to be submitted with financial bid, however un-priced sheet to be submitted with Technical Bid for evaluation purpose.

Appendix-I

OIL /WATER ANALYSIS

These maximum and minimum values are of entire field for design & selection of equipment.

OIL ANALYSIS

	Minimum	Maximum
API Gravity	39	45.5
Salt (PTB)	17	12000

WATER ANALYSIS

	Minimum	Maximum
Specific Gravity	1.04	1.12
Chlorides (PPM)	24550	49700
PH Value	7.5	7.5

FUEL GAS COMPOSITION (only in case of availability of fuel gas at location/well)

Composition	Mole %
Methane (C1)	72 - 78
Ethane (C2)	8.5 - 13
Propane (C3)	3 - 6
C4 +	1.5 – 3.0
CO2 (%)	1 – 2
N2 (%)	4 - 6
H2S	Nil
C.V (BTU/SCF)	1100 - 1250
Specific Gravity	0.7 – 0.75

Note: The well gas specification is differ from the mentioned fuel gas specifications. The well gas will be un-treated raw gas directly produced from well and may have larger number of C3+ contents.

Appendix-II

