OIL & GAS DEVELOPMENT COMPANY LIMITED



TENDER ENQUIRY NO. PROC-SERVICES/CB/DO-4949/2021 HIRING OF ROTARY STEERABLE SYSTEM SERVICES FOR DIRECTIONAL DRILLING

SCOPE OF WORK/TOR

- 1. OGDCL invites internationally reputed service companies with Minimum 15 years experience as Rotary steerable system services being key component for Directional wells. RSS technology should be owned by the service provider. Bidders are to submit comprehensive proposals for Rotary steerable system services for Directional drilling at OGDCL wells on "as and when required" rate running contract basis for a period of 02 years extendable with mutual consent.
- 2. The work requirement is tentative and anticipated ± 08 Directional drilling wells using RSS System in two years. However, OGDCL may increase or decrease the volume of work according to the requirement and well plans.

INSTRUCTIONS TO THE BIDDERS

GENERAL

- i. Bidders are to provide the following information with their bid document:
- a) Company's profile.
- b) Certification (Validity & copies)
- c) Client list with addresses/Fax/Phone Nos. for last 15 years experience for Confirmation of Performance.
- d) Company's work experience, detail of jobs in hand and past work experience in & outside Pakistan for the last 15 years in the field of rotary steerable system services.
- e) CV's of the offered Directional Drillers and MWD/LWD Engineer, Operations Manager & Drilling Engineer on role of the company showing proof of their required experience.
- f) Equipment technical specifications & usage data.
- g) Detail of facilities/ base in and outside Pakistan including availability of back up equipment etc.
- h) History of Company formation, detail of last 15 years Directional Drilling jobs using rotary steerable system done by Company at wells along with performance record separately for each hole size to be provided.
- i) Bidder to provide sound audited financial report of last 05 years.

- ii. Daily Operating rate per day for equipment will be applicable only for the tools when RIH below rotary table excluding circulating time and will not apply on back up tools at wellsite.
- iii. Bidder shall quote Standby rate up to maximum 70 % of daily operating rate of crew and equipment in the quoted rates.
- iv. Standby of the crew and equipment will be for maximum 02 days for each phase during OGDCL requirement and waiting on situation.
- v. Bidder to ensure performing contract services in security risk areas throughout Pakistan.
- vi. Bidder to confirm the mobilization of crew & equipment to location within 48 hours of mobilization notice.
- vii. The Operating rates for RSS & MWD will cover the charges for UBHOs, float subs, crossovers, sleeves & other associated equipment.
- viii. The lost in hole value of each tools are to be provided. Financial proposals without LIH value will not be qualified.
- ix. Depreciation rate will be 1.66% per month for lost in hole tools from date of manufacturing of tool.
- x. Bidder to confirm equipment manufactured by reputed western manufacturer & equipment manufacturing date will not be older than 05 years.
- xi. The redress charges of Stabilizer & NMDC will be included in rental rates of Stabilizers and NMDC for all hole sizes.
- xii. The redress charges for all equipment will be claimed one time for each hole section.
- xiii. No retainer charges or re-imbursement for inland or overseas costs of equipment & personnel will be paid by OGDCL.
- xiv. Damaged beyond repair cost will be incorporated in the tools operational rates and no DBR charges for any tool will be applicable.
- xv. High temperature application will be min 150 degrees centigrade & above. High pressure application will be min 10000 Psi & above.
- xvi. In case of stuck or mechanical failure, only personnel charges will be applicable. No operating/ standby charges of equipment will be applicable from the date of stuck till lost in hole.
- xvii. If the RSS job failure occurs at well due to the fault of equipment/personnel of contractor, then deduction will be made from invoice accordingly.

xviii. Bidder to provide job history in the Format below. This should include information in the past 15 years:

				Directional		NP		
Job	Client	Well	Trajectory	Tools	Service	Trajectory Related	Equipment Failure	Year
1								
2								
3								
4								

Commendations, Service award should be provided along with Table in Appendix *Under NPT column, explain if the job had any NPT either trajectory related or due to equipment failure

EQUIPMENT

Bidder to confirm the following:

- Availability of suitable equipment for drilling fluid with high solid concentration, WBM, OBM mud, UBD and air drilling jobs. MW up to 2.30 SG.
- ii. Availability of recoverable and MWD/ LWD (Radioactive source) equipment in Pakistan/ abroad along with mobilization period for OGDCL jobs.
- iii. The bidder to provide detail of base inside Pakistan. Complete list of related inventory available with the service provider to be attached. The bidders will also attach capability / proof of sufficient quantity of tools for conducting at least 02 RSS jobs in same hole size at the same time at different locations with back up tools at rig site.
- iv. Bidder to provide detailed specs, operational procedure, limitations, maximum circulating hours, GPM requirement & tools differential pressure at different GPM for each offered equipment/ tools.
- v. The offered tools should be capable enough to pump LCM pills, where needed. Any limitations w.r.t mud weight, viscosity, LCM concentration. solid content etc. must be clearly mentioned in technical proposal
- vi. The bidder must have license / approval from PNRA for the provision, storage & handling of radioactive sources for LWD service.

^{*}Contractor to provide some NPT/NCR incident closeout documentation as well

- vii. LWD Interpretation Expert: The bidder must have an expert for assistance with interpretation of logs and quality control of logs in real-time while providing LWD services (if required).
- viii. If the bidder has RSS Systems (Point the bit/ Push the bit/hybrid) for 6"/ 5-7/8" hole section, then bidder should quote the rates for all RSS systems in rate format. If the bidder has only one RSS system for 6"/ 5-7/8" hole section, then bidder should quote the rate for that RSS system. RSS System (Push the bit/hybrid) will be considered for 6"/ 5-7/8" hole section for financial Evaluation purpose.

OPERATING BASE/YARD

- i. Bidder to confirm the fully functional and well established operating base at Pakistan, if the bidder has no operating base in Pakistan, then bidder will confirm to establish the base within 30 days after issuance of LOI.
- ii. If the bidder has established base in Pakistan and has insufficient inventory in Pakistan at time of technical bid submission, then bidder will confirm to provide the required/ quoted inventory within 30 days of issuance of LOI and perform the job immediately after signing of contract.
- iii. Physical verification for the quoted equipment in bidder's inventory by OGDCL representative may be conducted during technical evaluation at the Service Company's base in Pakistan if required.
- iv. Bidder to facilitate the company representative to conduct physical inspection of the base/ yard for following if required:
 - a) Availability of quoted equipment
 - b) Total available inventory
 - c) Facility and equipment for repair and maintenance
 - d) Maintenance record of equipment

3) Service facility/ Workshop

- Bidder must have service facility in Pakistan or abroad as per requirement for inspection, servicing, repairing and maintenance of all equipment. Company reserves the right to conduct physical inspection of the facility.
- ii. The bidder to ensure performance for following procedures but not limited to:
 - a) Equipment assembly procedures and checklists.
 - b) Equipment history checking procedure
 - c) RSS service/ maintenance procedures
 - d) Qualification & pre-job inspection procedure before equipment mobilization
 - e) Testing, post job inspection & equipment failure examination procedure of incoming equipment.

PERSONNEL

- All contractor's personnel must have qualification and experience as per tender document and approved by company. Company will review the resumes of personnel before commencement of job.
- ii. Contractor is responsible for obtaining Security Clearance for foreigners/ non local staff in time prior to job execution.
- iii. Contractor crew should be on field location within 48 hours of Mobilization notice.
- iv. Contractor personnel must have valid visas and satisfying immigration formalities in the country of operations i.e. Pakistan.

Field Personnel

- i. **RSS Directional Driller** with graduate engineering degree with 05 years experience or diploma holder/bachelor's degree with 10 years experience as directional driller at directional multilateral ERD, UBD, short radius, relief and other specialized wells. CV's of the Directional Drillers to be attached.
- ii. **RSS MWD/LWD Engineers** with graduate engineering degree with 02 years experience or diploma holder/bachelor's degree with 06 years experience as MWD/LWD engineer at directional, multilateral ERD, other specialized wells. CV's of the MWD/ LWD Engineers to be attached.

Base Office Support Personnel

- i. **Operations Manager** with 10 years experience in RSS/ Directional drilling with an engineering/ bachelor's degree from a recognized university. The person should be available for consultation at company head office, Islamabad on short notice and available 24 Hours for support and advice during execution of services.
- ii. **Drilling Engineer/ Well Planner** with graduate engineering/ bachelor degree and 05 years well planning experience of RSS/ Directional and horizontal wells. The Drilling Engineer should be available at OGDCL head office for consultation during the planning and execution of job.

Mobilzation/ Demobilization

i. Mob/ demob cost of equipment and personnel will be on "rate per KM" basis. Mob/ demob cost will be paid for south/center region from Karachi/ south base being mobilization point and for North will be paid from Islamabad being mobilization point. Base availability for both regions is not mandatory. Minimum one base anywhere in Pakistan is mandatory.

ii. Equipment & Crew Mob/ Demob charges (Both ways from base to well site and back) will be paid one time for each hole size/ phase. However, in case of demand by OGDCL for new / conditional items/ replacement during the same phase, mob/ demob charges will be applicable.

Training Program for Company Engineers

The contractor should provide trainings to at least 05 company engineers on yearly basis free of cost on following modules but not limited to:

- Well Design (Trajectory planning)
- BHA and Drill String Design
- Torque & Drag
- Hole Cleaning in Deviated Wells
- Rotary Steerable Systems
- MWD and LWD systems
- Anti-collision and Survey Management

Software requirements

- i. Well Planning software (Trajectory planning, Hydraulics, anti-collision and Torque & Drag) should be available for performing calculations as per industry practices The software shall also be made available to company engineers for the purpose of well planning.
- ii. Provide license certification including full suite of RSS/ Directional Drilling module.
- iii. Bidder must have capability to do QA/QC on BGGM or HDGM model. It shall be part of End of job report.

Reporting

- i. OGDCL requires proper reporting procedures during all phases related to Drilling of the well including planning, execution and completion of job. Well planning proposals should be generated using the licensed software. Soft copies & hard copies in color print must be provided to head office regarding well plans, end of Well reports and Logs. Contractor to ensure submission of following reports to head office.
 - Well Proposal
 - Pre job Report
 - Daily Morning Report
 - End of Well report

- ii. Bidder to provide Pre-inspection reports to Operations Manager / Company man at the time of arrival of their equipment being used in Drilling / Sidetrack. Bidder to submit RSS manufacturing date, last service record, last redress record as part of pre-inspection reports.
- iii. Operational procedure / limitations / Circulating Hrs. of RSS, MWD tool etc. with complete specifications of each equipment / tool should be provided to CM/O.M on arrival at location prior to RIH RSS / MWD tool etc. Tool must be capable of running at least 150 to 200 hours.
- iv. Surface indications about any downhole problem with RSS stalling / abnormal change in standpipe pressure and bearing failure etc. should be reported to Company Man / O.M immediately. DD must call Company Man / OM on rig floor for eye witness of defective / repairable RSS or any MWD malfunction.
- v. In case of POOH due to RSS / MWD and all malfunction or defect, pull out reason must be clearly mentioned in DD daily activity report and OGDCL DMR (Daily Morning Report).
- vi. Observations about RSS / MWD and all tool after POOH should also be clearly mentioned in DD daily activity report and OGDCL DMR to clear any ambiguity and for invoices verification.
- vii. The Unit computer system must be able to provide real-time data acquisition, a backup system must be present at all times to prevent any loss of real time data, must have an independent off-line computer for data processing and with minimum one A4 format HP LaserJet printer.
- viii. All data shall be captured in both digital and hard copy forms. Unit shall be manned by at least one MWD or EMS Engineer 24 hours a day. All communication from or to the rig shall be via the well site representative. Personal working hours must meet OGDCL and local HSE regulations.

QA/QC

- i. The bidder must have a Quality Policy in place approved by it management.
- ii. The bidder must have a Quality Management System in place. ISO 9001 or equivalent management Certification to be provided as proof in the bid response.
- iii. The bidder must provide its own Anti-Collision policies & procedures.
- iv. The bidder must have its own Drill String Interference checks procedure, MWD signal strength prediction and depth control procedures.
- v. The bidder must have its own survey management policies and procedures in place.
- vi. The bidder must provide its pre-job engineering and equipment checklist.
- vii. The bidder to provide its chart book developed for LWD data and LWD data quality manual, as and when applicable.

HSE

- i. The bidder must have HSE Management system in place with assigned HSE Organization / Loss Prevention Policy and Loss Prevention Team in Pakistan
- ii. The bidder must have an incident reporting system and system for Hazard Risk Analysis in place
- iii. The bidder must have various HSE policies in place approved from its global management like IT & Data Security Policy, HSE Policy.

TECHNICAL EVALUATION CRITERIA

Sr. No.	Description	Weightage	Bidders Marks
1	Minimum 15 years experience as Directional drilling Services provider Company using Rotary Steerable System being key component. RSS technology should be owned by the service provider. Proof with required details of wells job. Provide detail of successful and unsuccessful job during last 15 years. (Mandatory)	30% Fixed	
2	CVs of 06 Directional Drillers having 05 years experience of Directional drilling/ Rotary Steerable System., CVs of 06 MWD/LWD Engineers having 02 years experience as MWD/LWD engineer, track record & availability of personnel for OGDCL as per tender document.	20% RSS D. Driller=03 per year MWD/LWD Eng.=2.5 per year	
3	Service Company's established base in Pakistan or Assurance to establish base within 30 days after issuance of LOI.	20% Established base=20 marks Assurance to establish base: 15 marks	
4	Company's ability with proof/physical verification to undertake two simultaneous OGDCL Directional drilling jobs using Rotary Steerable System. each for the same size at different locations with back up inventory.	20% Ability 01 job=10 marks	
5	Last 05 years Audited sound financial report of the bidder	10% 1 year Audited Financial Report=02 marks	
	TOTAL MARKS	100%	

Note: -

Technical evaluation will base upon above criteria. Minimum qualifying marks for each discipline are 75%, Overall aggregated marks for qualifying will be 80%.

RATE FORMAT

	RATET		0100111 47013	074110017		
		OPERATING	CIRCULATING	STANDBY	REDRESS RATE	LIH
		RATE PER DAY	RATE PER HOUR		PER OCCURRENCE	COST
S.N	DESCRIPTION	(US\$)	(US\$)	(US\$)	(US\$)	(US\$)
01	RSS System (Point the bit/hybrid) for 12-1/4" hole section along with accessories	(==,,	(,	(==,,	(==,,	(==+,
02	Motorized RSS System for (Point the bit/hybrid) for 12-1/4" hole section along with accessories					
03	RSS System (Push the bit/hybrid) for 12-1/4" hole section along with accessories					
04	Motorized RSS System (Push the bit/hybrid) for 12-1/4" hole section along with accessories					
05	8" MWD system					
06	8" Bypass circulation sub		N/A			
07	8" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
08	12-1/4" Integral Blade Stabilizers		N/A		N/A	
09	RSS System (Point the bit/hybrid) for 8-1/2" hole section along with accessories					
10	Motorized RSS System (Point the bit/hybrid) for 8-1/2" hole section along with accessories					
11	RSS System (Push the bit/hybrid) for 8-1/2" hole section along with accessories					
12	Motorized RSS System (Push the bit/hybrid) for 8-1/2" hole section along with accessories					
13	6-3/4" MWD system					
14	6-3*4" Bypass circulation sub		N/A			
15	6-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
16	8-1/2" Integral Blade Stabilizers		N/A		N/A	
17	6-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)					
		L	I.			

18	6-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)			
.0	6-5/4 LVVD Quad Combo (Density, Resistivity & Some logs)			
19	RSS System (Point the bit/ Push the bit/hybrid) for 6"/ 5-7/8" hole section along with accessories			
20	Motorized RSS System (Point the bit/ Push the bit/hybrid) for 6"/ 5-7/8" hole section along with accessories			
21	4-3/4" MWD system			
22	4-3/4" Bypass circulation sub	N/A		
23	4-3/4" Non-Magnetic Drill Collar-30ft.	N/A	N/A	
24	6"/ 5-7/8" Integral Blade Stabilizers	N/A	N/A	
25	4-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)			
26	4-3/4" LWD Quad Combo (Density, Resistivity & Sonic logs)			
27	Single shot kit & Multi-shot kit	Rate per Job		
28	Directional Driller Each	N/A	N/A	N/A
29	MWD/ LWD Survey Engineer Each	N/A	N/A	N/A
30	Complete Crew (04 Members) Mob/Demob Package rate per KM	Rate per KM	l	N/A
31	Complete Equipment Mob/Demob Package rate per KM	Rate per KM		N/A

Note: -

1. LWD SYSTEMS

- LWD Triple Combo = Density, Porosity & Resistivity logs
- LWD Quad Combo = Density, Porosity, Resistivity & Sonic logs
- 2. If the bidder has all RSS Systems (Point the bit/Push the bit/hybrid) for 6"/ 5-7/8" hole section, then bidder can quote the rates for all RSS systems.
- 3. If the bidder has only one RSS system for 6"/ 5-7/8" hole section, then bidder should quote the rate for that RSS system.
- 4. RSS System (Push the bit/hybrid) will be considered for 6"/ 5-7/8" hole section for financial Evaluation purpose.

FINANCIAL EVALUATION CRITERIA

S.N	DESCRIPTION	OPERATING TIME (DAYS)	CIRCULATING TIME (HRS.)	STANDBY TIME (DAYS)	QUANTITY OF REDRESS	10 % LIH (US\$)	Total Cost (US\$)
	SECTION-B (12-1/4")			1	1	
01	RSS System (Point the bit/hybrid) 12-1/4" hole section along with accessories	6	144	02	01		
02	Motorized RSS System (Point the bit/hybrid) for 12-1/4" hole section along with accessories	4	96	02	01		
03	RSS System (Push the bit/hybrid) 12-1/4" hole section along with accessories	6	144	02	01		
04	Motorized RSS system (Push the bit/hybrid) for 12-1/4" hole section along with accessories	4	96	02	01		
05	8" By Pass circulation sub	10	N/A	02	01		
06	8" Non-Magnetic Drill Collar-30ft.	10	N/A	02	N/A		
07	12-1/4" Integral Blade Stabilizer	10	N/A	02	N/A		
	SECTION-C (8-1/2")		l		1	1	
80	RSS system (Point the bit/hybrid) for 8-1/2" hole section along with accessories	8	192	02	01		
09	Motorized RSS system (Point the bit/hybrid) for 8-1/2" hole section along with accessories	4	96	02	01		
10	RSS system (Push the bit/hybrid) for 8-1/2" hole section along with accessories	5	120	02	01		
11	Motorized RSS system (Push the bit/hybrid) for 8-1/2" hole section along with accessories	3	72	02	01		
12	6-3/4" By pass circulation sub	20	N/A	02	01		
13	6-3/4" Non-Magnetic Drill Collar-30ft.	20	N/A	02	N/A		
14	8-1/2" Integral Blade Stabilizers	20	N/A	02	N/A		

	SECTION-D (6"/ 5-7/8")						
15	RSS system (Push the bit/hybrid) for 6"/ 5-7/8" hole section along with accessories	10	240	02	01		
16	Motorized RSS system (Push the bit/hybrid) for 6"/ 5-7/8" hole section along with accessories	5	120	02	01		
17	4-3/4" By pass circulation sub	15	N/A	02	01		
18	4-3/4" Non-Magnetic Drill Collar-30ft.	15	N/A	02	N/A		
19	6"/ 5-7/8" Integral Blade Stabilizer	15	N/A	02	N/A		
20	02 Nos. Directional Drillers	45	N/A	02	N/A	N/A	
21	02 Nos. MWD/LWD Survey Engineer	45	N/A	02	N/A	N/A	
22	Complete Crew (04 Members) Mob/Demob Package cost per well		3	000 KM			
23	3 Complete Equipment Mob/Demob Package cost per well 3000 KM						
ı	RSS 01 well cost = (Sum of S#01 to S#23)						
II	RSS 02 years cost (08 wells) = (I) x 08						

Note: -

- I. RSS System (Push the bit/hybrid) will be considered for 6"/ 5-7/8" hole section for financial Evaluation purpose.
- II. Prices should be quoted on rate format only. Financial evaluation will be done by OGDCL.

OTHER IMPORTANT INFORMATION

BIDDING METHOD:

Bids against this tender are invited on 'Single Stage Two envelop"

AMOUNT OF BID BOND:

Bid Bond /Bid Security amounting to USD:110,000= is to be attached / provided with the technical bid. Please see Master Set of Tender Document for further details.

BID PRICE:

- i. Bid price shall be inclusive of all taxes, duties, levies, charges etc., except Provincial Sales Tax (PST)/ Islamabad Capital Territory Sales Tax (ICT) in Pakistan.
- ii. The prices quoted by the successful bidder (contractor) for required services shall remain firm and final throughout contract period. The price charged by the successful bidder (contractor) for required services shall not vary from the prices quoted by the service company.

MANDATORY REQUIREMENT

For online payment to vendors/contractors through (IBFT & LFT). Following info is required from your company: -

- 1. IBAN (INTERNATIONAL BANK ACCOUNT NUMBER 24 DIGITS).
- 2. VENDOR NAME AS PER TITLE OF THEIR BANK ACCOUNT.
- 3. NTN NO WITH INCOME TAX CERTIFICATE
- 4. CONTACT # OF COMPANY CEO/OWNER (MOBILE & LANDLINE).

- 5. POSTAL ADDRESS.
- 6. BANK NAME.
- 7. BANK BRANCH NAME & ADDRESS.