



KENYA ELECTRICITY GENERATING COMPANY PLC

RFx: 5000015634

KGN-GDD-074-2024

TENDER FOR SUPPLY, INSTALLATION AND COMMISSIONING OF NEW 2000 HP VFD ELECTRIC WALKING LAND DRILLING RIG WITH TOP DRIVE AND ASSOCIATED EQUIPMENT.

(Open International)

Dated: 31st July, 2024

Clarification No.5

In accordance with the **Tender for Supply, Installation and Commissioning of New 2000 HP VFD Electric Walking Land Drilling Rig with Top Drive and Associated Equipment**, KenGen issues **Clarification No.5** as follows:

Requested Clarification	KenGen's Response
<p>Pg110, SECTION 4: MUD PUMPS AND HIGH-PRESSURE MUD LINES</p> <ul style="list-style-type: none"> • Original OTECO manufactured, certified, and tested high temperature adjustable, re-settable, pressure relief valves rated to 41MPa (6,000psi) --- - The pressure should be 5000psi, please confirm. 	<p>Mud pumps shall be supplied with certified and tested resettable pressure relief valve with pressure range 7MPa-41MP (1000psi to 6000psi). Pump discharge pressure 35MPa (5000Psi).</p>
<p>Pg111:</p> <ul style="list-style-type: none"> • Suitable for liner sizes from 127mm (5") to 190mm (7.5"). ---- The Max. diameter of the liner is 7" normally, please confirm. 	<p>Maximum liner diameter of 7" (~180mm) is acceptable.</p>
<p>The ATEX/DNV/IEC/CSA certificate for the related equipment or devices is a MUST or just a standard reference? According to the ITT 15.5, it should be a reference only, not compulsory. Please kindly clarify.</p>	<p>Provide as per the tender requirement. Refer to ITT 15.5: The Tenderer may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Procuring Entity's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements</p>
<p>Regarding the BOP:</p> <ul style="list-style-type: none"> i. What's the working temperature of the BOP requested? ii. What does the term Class 4 or Class 5 mean? There is no other description in the tender document. iii. What does Cooling Line refer to, is it only a line or including the whole cooling equipment? 	<ul style="list-style-type: none"> i) The BOP shall be suitable for geothermal well drilling. Expected temperatures up to 150°C. ii) Class 4 and class 5 refers to the number of annular and ram preventers of the BOP stack. The 21¼" BOP shall have a minimum of one annular preventer and two rams (pipe rams and blind rams). The 13 3/8" shall have one annular preventer and three rams (pipe, blind and shear rams). iii) The BOP supplied shall have provisions for cooling water circulation in case of high temperatures during drilling complete with all required accessories.

	Bidders shall provide details of the BOP cooling system provided.
The generator housing noise level is 70dB, where will it apply to all the components of the rig	Refer to Clarification No.2. uploaded on our website. Noise level shall not exceed 75dB within a radius of 1m from the generator set housing.
Pipe Racking System HH PRS is electrically powered and does not require a hydraulic source	Electrically powered pipe racking system (PRS) is acceptable. Technical specification and operational details shall be provided.
Pipe Racking System In order to reduce the frequency of personnel working at heights and improve safety. PRS can only operate at a slow speed at the racking board and is only used for maintenance and repair condition.	Bidders shall provide the operation capabilities and technical specifications of the PRS offered. The operational details shall include operations from the drillers console and at the racking board.
IRON ROUGHNECK IRON ROUGHNECK doesn't have independent HPU, it shares the same HPU with other equipment.	Bidders shall provide HPU with sufficient capacity to operate the required rig floor equipment and tools including the iron roughneck.
Four (4) generators set and One (1) auxiliary generator. ➤ All generators shall meet noise control standards and shall be supplied complete with noise control rooms. please provide the noise control standards	75 dB(A) at 1 metre from the enclosure surface. National Environmental Management Authority (NEMA) standards shall apply.
POWER SYSTEM Transformers: The power room should be fitted with a main step-down transformer 600/400v with rating capable of supplying all 400V loads at the rig. The Transformer should be: • Dry Type • Rugged and capable of working in harsh environment. • Forced Air cooled. • Class H insulation Modify the 600/415v to 600/400v, and the Auxiliary (emergency) generator voltage is 400V	Refer to Clarification No. 3 uploaded on our website. The auxiliary generator voltage is 400V.
Rig capacity 1. For drawworks, Hoisting capacity is 500MT (1,100,000 lbs) at page 95; Lebus type for 38mm (1½") drill line 2.For mast, Mast shall be designed to accommodate 500MT (1,100,000 lbs) portable Tesco/ Canrig top drive system.at page 96 3.For Crown block 500MT (1,100,000 lbs) with Seven Sheaves conforming to API SPEC 4F. 4.for Travelling block, Load capacity~ 500MT (1,100,000 lbs) at page 106	The rig capacity shall be at least 500 metric tonnes (550 short tons/ 1100000lbs).
P115. e. Mud lab (cabin) on one tank Mud cleaning – ability to recirculate within the solid control system.	Mud operator cabin (mud man cabin) on one of the mud reservoir tanks shall be provided as per the tender technical specifications.
Mud lab (P120). Complete mud lab with mud testing equipment (mud balance, marsh funnel, cup fann viscometer, HPHT filter press, pH meter, retort, methylene blue test kit), office space, cabinets, working area, seats, laptop computers and colored printer.	Containerized mud lab with mud testing equipment as specified in the tender document for mud testing and analysis.

<ul style="list-style-type: none"> Each tank has at least two stainless steel 304 Aerofoiled 3 blade design mud agitators positioned in such a way to achieve proper mud churning. Frame-proof AC motors and As the shaker tank and trip tank no space for the agitators, only below tanks has agitators: Intermediate tank:2 agitators, Suction tank:3 agitators, Reserve tanks:6 agitators, Pill's tank: 3 agitators 	Provide stainless steel 304 Aerofoiled 3 blade mud agitators as specified in the tender document except for the shaker tank.
<ul style="list-style-type: none"> Dresser type pipe coupling, butterfly valves, gate valves and dumb valves with flanged ends shall be provided. All the dumb gates must seal HAMMER SEAL UNION pipe coupling, butterfly valves, gate valves and dumb valves (All of them be MADE IN CHINA with flanged ends shall be provided. All the dumb gates must seal tightly to ensure no leakage of fluids takes place. 	Provide high quality pipe couplings and butterfly valves as specified in the tender document.
Mud pill chamber <ul style="list-style-type: none"> A suitable sized agitator of steel Q235B 4 Canted blade design mud agitators of approx. diameter 1m coupled with flameproof electric drive motor shall be provided in this pill tank. 	Bidders shall provide suitable sized stainless steel 304 aerofoiled 3 blade agitator as specified in the tender document.
Mud mixing Two (2) centrifugal pumps for the active system. Capacity at least 250m ³ /hr.	Bidder shall provide two (2) high quality centrifugal pumps for mud mixing as specified in the tender document.
Chemical mixing tank Tank capacity ~ 100 gal	Provide at least 500 litres (132 US gal) chemical mixing tank.
Pump system for solid control system Feed pumps (MADE IN CHINA) for desander, desilter, centrifuge and degasser to be size 6"x8"x14" coupled to weather and frame proof 3-phase motors	Provide high quality feed pumps as specified in the tender document.
Desander Desander, Integrated on Mud cleaner	A high-performance mud cleaner with de-sander and de-silters is acceptable. Bidder shall provide the technical specifications and configuration of the mud cleaner.
Client requires that Milestone 5: 10% payment be paid with Milestone 4. Meanwhile Seller to issue 10% BG for 1 year of warranty period.	Refer to Addendum No.2 upload on our website.

SUPPLIER ACKNOWLEDGEMENT OF CLARIFICATION No.5

We, the undersigned hereby certify that the Clarification No.5 is an integral part of the document and the alterations set out in Clarification has been incorporated in the Tender Proposal.

Signed.....

Tenderer.....

Date.....