



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: 15<sup>th</sup> July, 2024

**Clarification No.2**

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.2 as follows:

Bidder's Question	KenGen's Response
<p><b>Section 9: Wireline Unit</b></p> <p><u>Wireline Unit</u></p> <ul style="list-style-type: none"><li><i>The operator's cabin shall have data acquisition equipment..." Please specify type/specification/requirements/expectations of the data acquisition equipment</i></li><li><i>"Dual-drum configuration and high strength heat resistant cable to run the electronic tools." Please specify type, size &amp; specification (temperature rating, material, etc) of required cable</i></li><li><i>"Wire line size 2.7mm (0.108"). Six (6) spare rolls." Please confirm this 0.108" slickline wire is for 2<sup>nd</sup> Drum of Dual-Drum and that this wire should be installed on Drum. Please specify preferred specification (temperature rating, material, etc) of 0.108" slickline wire and length. Please confirm "Six (6) spare rolls" are coils of spare 0.108" slickline and specify total length each</i></li></ul> <p><u>Lubricator</u></p> <ul style="list-style-type: none"><li><i>"Three (3") 3M wire line manual BOP..." Please confirm quantity of BOPs &amp; configuration (Single, Dual, Triple or Quad Ram) of each and sizes of wire to be sealed around</i></li><li><i>It is noted that there is no reference to Pressure Control Equipment (PCE) associated with E-Line/Braided Line operations such as Grease Injection Head, Grease Control Units. Please confirm requirements for PCE in-line with high strength heat resistant cable to run the electronic tools operations</i></li><li><i>It is noted there is no mention of Top Sheave for high strength heat resistant cable to run the electronic tools. Please confirm requirements</i></li></ul>	<ol style="list-style-type: none"><li>1.The data acquisition system shall be capable of displaying, capturing, aggregating and performing advance calculations and data plotting. The system shall have the capacity to acquire and store data automatically, provide real time data monitoring and display diagnostic errors. Compatible with Windows 11 and office and USB data transfer.</li><li>2.The high strength heat resistant cable shall be stranded (steel armored) electric multicore cable (at least 8 core). Length at least 6000m, Dia at least 8mm, Temperature resistance 300°C for four (4) hours. Suitable for use in H<sub>2</sub>S and corrosive geothermal environment.</li><li>3.One drum shall be used to run the slickline and the second drum for cable operations. The logging unit shall be supplied complete with slickline, and cable installed on the drums. Six (6) spare slickline rolls each of 6000m length. The wire shall exhibit high corrosion and pitting resistance at temperatures above 300°C in H<sub>2</sub>S, CO<sub>2</sub> and CL- for geothermal well logging. Material ANSI 316. Line pull capacity at least 1300kg.</li><li>4.One set of triple ram BOP complete with pressure control equipment, grease injection head and grease control unit.</li><li>5.Floor sheave assembly with line wiper shall be provided</li><li>6.Gin pole for lifting lubricator- minimum height requirement six (6) metres.</li><li>7.Self-contained skid mounted single drum rugged and compact wireline (slickline) unit with drum capacity of at least</li></ol>

<ul style="list-style-type: none"> <li>• <i>“Gin Pole for the safe lifting...” Please specify minimum/maximum height requirements</i></li> </ul> <p><b>Section 19: Directional Equipment &amp; Tools</b>  <u>Self-Contained Wireline Logging Unit and Accessories</u></p> <ul style="list-style-type: none"> <li>• Is this an additional unit to Wireline Unit specified in Section 9 as per above?</li> <li>• Please confirm configuration – Single or Dual Drum?</li> <li>• Identified as being “Wireline Logging Unit” but wire specified as “2.7mm (0.108”)”. Please clarify required cable/wire type, size, specification and Drum capacity</li> </ul>	<p>6000m. The unit shall have lifting shackles and side entry forklift pockets.</p>
<ol style="list-style-type: none"> <li>1. Since there are 22 sections of equipment needed to prepare, we apply for a tender closing date extension of one month to August 18th, 2024.</li> <li>2. We are not a manufacturer. If we can provide the manufacturer's authorization letter, can we participate in the bidding ? Or do you accept Consortium?</li> <li>3. There is a total of 22 schedules. If our quotation is incomplete and only a part of it is quoted, will it be valid?</li> </ol>	<ol style="list-style-type: none"> <li>1. The tender is extended to close on <b>2<sup>nd</sup> August 2024 (Refer to Addendum No.1 Uploaded on our website).</b></li> <li>2. The tender is specific to <b>rig manufacturers</b>. A Joint Venture (JV) with rig manufacturers is acceptable (<b>Refer to MR 25</b>).</li> <li>3. Bidders <b>MUST</b> quote for all schedules to be considered responsive (<b>Refer to MR 16</b>).</li> </ol>
<ol style="list-style-type: none"> <li>1. Please clarify the margin of preference applicable for locally manufactured goods only?</li> <li>2. If a foreign bidder make a JV with a Kenyan citizen contractor, but there was no goods manufactured in Kenya only service such as transportation from Mombasa to Olkaria was performed by the Kenyan citizen contractor, could this kind of JV be applicable for 10% margin of preference?</li> </ol>	<p>The margin of preference is typically a percentage advantage given to locally manufactured goods over foreign goods.</p> <p>If a foreign bidder forms a JV with a Kenyan citizen contractor but only provides services (such as transportation) and does <b>not</b> produce goods in Kenya, the 10% margin of preference would <b>not</b> apply. This preference is reserved for goods manufactured or produced within the country, and services like transportation do not qualify.</p>
<ol style="list-style-type: none"> <li>1. Regarding “Drilling one directional well using Kelly system to 3000m” “Walking the rig and drilling one directional well to 3000m using top drive system” and “Rigging down the rig, rig move and rigging up on new location” please clarify  the scope of work the contractor  the time to start drilling  the location of wells  Please provide the responsibility matrix between contractor and KENGEN.</li> <li>2. Drilling two wells and rig down/rig move/rig up on new location are part of training. But the completion time of “drilling two wells and rig down/rig move/rig up on new location” was unknown. We request to remove “Drilling two wells and rig down/rig move/rig up” from payment milestone 4 and the proposed payment milestones as below.  Milestone 1: 30% Advance payment upon issuance of advance payment guarantee.  Milestone 2: 30% payment after FAT and certificate by third party.</li> </ol>	<ol style="list-style-type: none"> <li>1. The contractor shall be responsible for assembling, commissioning, drilling one well using Kelly system, walking the rig to drilling one well using top drive at same well pad, rig move and rig up at specified new location ready to drill before handing over the rig to KenGen. The well location will be in Olkaria Kenya. KenGen will avail the drilling location, drilling water and drilling materials.</li> <li>2. Payment milestones shall remain as indicated in the <b>SCC under Clause GCC 16.1</b>.</li> <li>3. <b>Milestone 5</b> under GCC 16.1 has been modified to read <b>“10% payment after completion of warranty period”</b>.</li> </ol>

<p>Milestone 3: 20% payment upon receipt of all shipping documents</p> <p>Milestone 4: 15% payment upon successful rig installation and commissioning at Olkaria, Kenya.</p> <p>Milestone 5: 5% balance payment upon receipt of 5% warranty bank guarantee.</p> <p>There is no any clause definition the “DLP”, please clarify. We would like to replace DLP as quality warranty period.</p> <p>3. Please clarify the exact address in Olkaria. Or clarify if the destination is a well pad requested for training of drilling or a yard.</p> <p>4. Advance payment (30%) should be done through Electronic Funds Transfer (EFT); The remaining payment (70%) should be done through Irrevocable, Letter of credit(L/C) at sight.</p> <p>5. Contract duration should be according to warranty period.</p>	<p>4. Olkaria is in Naivasha Kenya. Approximately <b>130km</b> from Nairobi.</p> <p>5. <b>20% Advance payment</b> shall be paid through EFT; <b>the balance 80% shall be through irrevocable LC.</b></p> <p>6. Under SCC, <b>Contract duration</b> has been modified to read <b>“30 months”</b> from contract signature.</p>
<p>1. According to the Invitation to Tender, on Pg. 2 of the Tender Document, it is stated that “The tender is specific to Rig Manufacturers Only (Open International).” Additionally, in Stage 1: Mandatory Requirements, MR 19 on Pg. 31, there is a request for a “Manufacturer’s Authorization Letter from the Original Equipment Manufacturer.”</p> <p>However, we wish to seek clarification on the specific category of this tender, that is; if tenderers who are not Rig Manufacturers can bid as long as they provide the Manufacturer’s Authorization Letter as per MR 19 and other mandatory documentation as per the tender. Additionally, most of the rig manufacturers do not manufacture all the items listed in the tender therefore, they have stated that the need local support to compile the complete bid. Kindly advise.</p>	<p>1. The tender is specific to <b>rig manufacturers only</b>. Manufacturer authorization from original equipment manufacturers (OEM) <b>SHALL</b> apply to all equipment not manufactured by the <b>specific rig manufacturer</b>.</p>
<p>1. Is "mast drive pins" a buffer cylinder?</p> <p>2. The deadline anchor is usually installed on the opposite side of the driller, please confirm.</p>	<p>1. Mast drive pins refer to buffer cylinder.</p> <p>2. Bidders to specify the side to install the deadline anchor either on the drillers side or opposite driller side.</p>
<p>1. Is "carrier rail" a straight ladder frame?</p> <p>2. Is "clamps" a connector connected to the mast?such as pins ?</p>	<p>1. The carrier rail refers to the straight ladder frame.</p> <p>2. Clamps are connectors holding components together</p>
<p>1. Does the "Mast sections" here only refer to the various segments of the main frame of the mast, rather than all the lifting eyes on the mast</p>	<p>Mast sections refer to main segments of the rig mast. The main mast segments shall have lifting points (eyes) well marked, tested and certified.</p>
<p>1. aviation/strobe lights generally installed on crown block. Please confirm</p>	<p>Aviation/strobe lights shall be installed on the crown block</p>
<p>1. "Mast base" refers to the height of the substructure or the height of the connection point at the bottom of the mast?</p>	<p>Mast base refers to the width of mast at the bottom of the mast</p>
<p>1.The 590 Tons (1300000 lbs) here do not match the 550 Tons (1200000 lbs) required for the mast</p>	<p>Crown block shall be 550 tons (1,200,000lbs) and conforming to API 4F and API 8C. Bumper blocks to be installed</p>
<p>1.Is the top drive guide rail fixed on the back frame of the mast or suspended at the bottom of the crown block?</p>	<p>Top drive guide rails shall be fixed on the back frame of the mast. The guide beams shall be configured for the offered mast</p>

	and shall allow easy rig up and rig down during rig move.
1. The current wind speed is higher than the content specified in API-4F. Please confirm whether to follow the land wind speed or ocean wind speed required by 4F, or to follow the user specified wind speed.	To follow API-4F specified land wind speed.
1. All ear plates here need to be equipped with appropriate d-shackle and sling, only referring to the rigging for hanging the traveling block? 2.Can you clarify the meaning of conducting load tests according to half of the SWL?	1. All pad eyes shall be supplied complete with suitable set of d-shackle and sling 2. All pad eyes to be tested to <b>one &amp; half (1½ x S.W.L) the safe working load</b> (S.W.L) & certified according to API. All pad eyes to be painted safety yellow & marked with the SWL limit.
1. Please ask the customer to clarify the meaning again, which means "all these platforms should have seat belt hanging points, and try to use as little or no railings as possible"?	Access platforms with safety belt rope connecting loop shall be provided at: Standpipe gooseneck connection, Casing stabbing board, Sheave unit lubrication position and the platforms less handrails.
1. "One (1) spin-up wrench counterweight bucket, guide, and sheave unit, located at convenient place towards the off-driller's side." Please clarify whether this refers to the suspension pulley provided for hydraulic tongs	This refers to suspension pulley for hydraulic tongs.
1. The mast meets API 4F standards, the crown block pulley meets API 8C standards, and API 8C standards are not applicable to the mast	1. Mast shall be designed and manufactured in accordance with latest API spec. 4F (PSL 1, SSL E2/U2). 2. Crown block assembly shall conform to API spec 4F and hoisting sheaves to API Spec 8C.
1. Please confirm the transportation type of the drilling rig. According to the cluster well and the transportation environment provided by the customer, the step-by-step translation should be more suitable	1. Cluster wells within same well pad, the rig will use the walking system. 2. Rig move to different well locations will use trailers and trucks.
1. It is inconsistent with the description of 10.6m (35ft) on page 96. Please confirm the correct height and change it to 10.668m (35ft)	Height from ground level Minimum 10.7m (~35ft)
1. The "Rotary 500 tons" here is inconsistent with the load requirements of 550 tons and 590 tons for the P96 mast. Please confirm the final load	Rotary power capacity shall be 550 tons.
1. Please confirm the specific meaning of raising with the setback support.?	Setback support shall form part of the rig floor during rig up and raised together with the rig floor.
1. The anti-slip Matting are usually placed directly on the flooring, not fixed on the flooring	Anti-slip, high wear resistance matting shall be placed over the checkered plate floor.
1. Can we replace it with punched anti slip pedals :	The stair steps shall have anti slip punched checkered plate.
1. Doghouse and tool room supports Folding floor modules supports to accommodate doghouse on driller's side and tool room on off-driller's side. Does this mean "the bracket can rotate"	The doghouse and toolroom support shall be folded to lie on the rig floor beam during rig move.
1. The dimensions of the bottom seat, top seat, setback, motor beam, etc. are recommended to be 12m x 3m x 3m but cannot be made according to 9m x 2.5m x 2.5m	Major components such as mud pumps, generators, draw-works, rig floor beams may be up to 12mx3.0mx3.0m including skid.
1. The assembly consists of chain transmission and mounts on two skid units (drawworks skid, electric motor skid). The AC VFD drawworks has a gearbox transmission but no chain	Gear box connection accepted for draw works AC motors

transmission. The motor and drawworks are installed on a single skid.	
1. Please explain to the user, what type of brake is assisted braking, Eaton brake or other? Can you provide relevant information on this type of brake ?	Bidders shall provide appropriate dynamic (working) and parking braking system. Details of the braking system shall be provided.
1. Mud pumps model FB- 1600	Three (3) set of AC motor driven 1600Hp mud pumps. Bidders shall provide the models of the mud pumps offered.
1. The description before and after the rated pressure of the mud pump is contradictory. Please confirm whether it is 35MPa or 51.7MPa	Mud pump maximum discharge pressure 35 MPa
1. Please clarify whether to configure metric or imperial cylinder liners as well as ceramic or bimetallic cylinder liners	The pump liners shall be configured in Metric. Bimetallic cylinder liners.
1. Only the discharge dampener can be equipped with hydrilla k-20	Dampener shall be installed on the pump discharge.
1. If it is a 35MPa mud pump, the suction and discharge cylinders are integrated	Bidders shall provide technical details of the pump construction.
The external dimensions of the 1600HP dual sided drive mud pump are about 8.8m length x 3.5m width x 3m height (transportation dimensions, excluding five-way, air case, and pressure relief manifold)	Major components such as mud pumps, generators, draw-works, rig floor beams may be up to 12mx3.0mx3.0m including skid
The weight of the 1600HP dual sided drive mud pump is about 44 tons (transportation weight, excluding the five way valve, air case, and pressure relief manifold)	Bidders shall provide details on weight and dimension of the pump provided.
1."3000 MWP Spool" need more information, it is 3meter 2000psi flanged spool? 2.throttle and isolation valves hydraulic or manual operator?	Throttle valves to be hydraulic operated. Hydraulic control and operation unit to be provided.
Two (2) heavy duty splash-proof fully guarded (IP-55),	Maintain Tender specification of minimum <b>IP-56</b>
Terminal box-Stainless steel, IP55with bus bar connections for main cable terminations.	Maintain Tender specification minimum IP-56
More detailed casing specification (size &ppg) information needs	The casing specifications are 30" 157lb/ft, 20" 94lb/ft, 18.5/8" 87.5lb/ft, 16" 65lb/ft, 13-3/8" 68lbf, 13-3/8 54.50lb/ft, 11¾" 47lbf, 9-5/8" 47lb/ft, 9-5/8" 40lb/ft, 7" 29 lb/ft, 7" 26lb/ft, 5½" 23lb/ft, 5½ 17lb/ft, 4½" 11.60lb/ft
Shall be able to be operated from inside the driller's console, and locally at the derrick racking board with a slow speed.	Bidder to provide full technical details of the pipe racking system (PRS).
All cable trays should be elevated and the materials used should be able to support all power and instrument control cables.	All Cable trays shall be elevated and of galvanized steel capable of supporting all power supply and instrumentation control cables. Bidders shall specify the material used.
1. Active and reservoir mud tanks made up of the following. a. One shale shaker tank- 60m3 a. One shale shaker tank- 60m3 b. Intermediate tank- 50m3 c. Suction tank- 65m3 c/w mixing pumps and agitators. d. Three reservoir tanks- 65m3 each c/w mixing pumps and agitators. P225.Bidder to note that overall dimensions of each rig component having oilfield skid should preferably not exceed 12.0m Length x 3m Width x 3m Height.	Dimension 12mx3mx3m for mud tanks inclusive of skid is acceptable.

<p>The entire mud mixing equipment shall be mounted on a common skid comprising of the following:</p> <ul style="list-style-type: none"> <li>a. Two (2) Oteco Ventura type mixing hoppers.</li> <li>b. Two (2) high performance jet shearing hopper</li> <li>c. Two (2) centrifugal mission pumps</li> <li>d. Two (2) centrifugal pump</li> </ul>	Two (2) centrifugal pump-system for pre-hydration
<p>Pre-flush tank</p> <ul style="list-style-type: none"> <li>• One pre-flush tank for cementing job</li> <li>• Two (2) centrifugal pumps of at least 180m<sup>3</sup>/h</li> </ul>	Minimum Capacity 30m <sup>3</sup>
<p>Approximate dimension 2000mm(L)x1450mm(W)x6450mm (H-from inside block adapter to top of tool joint with 3350mm (11ft) links).</p>	Maintain as per the tender specifications
Weight-20900kg	Maintain as per the tender specifications
Hydraulic torque boost for additional make up or break out torque.	Maintain as per the tender specifications
Integration of HPU and top drive body	Maintain as per the tender specifications
<p>Electrically driven pump for gear box lubricant top-up. Back up hand pump complete with accessories.</p>	Accessories to assist during maintenance and servicing of the top drive. They shall be supplied together with the TDS.
In China, business permit means Registration certificate which is same as MR 1.	Valid copy of the business permit for local firms (Foreign firms to provide where applicable). MR2
As a major rig manufacturer in the world, we are not IADC member. How shall we deal with this?	Valid reference letter from IADC signed and stamped as per <b>MR 5</b> requirement.
<p>We tried to register on the portal but it mentions that domain hhcp.com.cn has been registered. Kindly inform how can we register again as previous staff has left HH.</p>	Registration process given in <b>ITT 1.2(a) page 23</b> .
<p>Auxiliary generator (500kW, 400V) unit with Caterpillar engine (page 137) Auxiliary (emergency) generator specifications</p> <ul style="list-style-type: none"> <li>■ Output – 600kW-750kVA (page 139)</li> </ul> <p>Requirement of power is contradictory in two places. Please verify the model/parameter required. CAT C18 is recommended.</p>	The auxiliary generator shall have a maximum rating of 600kW and minimum of 455kW. The CAT generator shall have coupled to the appropriated <b>CAT C18</b> engine of latest design minimum Tier III emission control.
<p>Caterpillar 3512B series Electronic Control Oilfield turbocharged Diesel engine 1365kW, of latest design coupled to SR500 Generator. Caterpillar 3512B is required but it can meet the requirement of temperature and emission. Whether Caterpillar 3512C (SR500, 1310kW/1190kW) is accepted?</p>	CAT 1352C is acceptable
<p>The sound proofing will be designed in such a way as to ensure noise levels outside the generator housing will not exceed 70dB when generators are running. Please verify the details (distance, Position etc) of measuring standard or method.</p>	Noise level shall not exceed 70dB within a radius of 5m from the generator set housing.
<p>Land rig shall be manufactured in accordance with API standards and all equipment will be certified for use in hazardous areas classifications in accordance with API – RP 500 specifications. API monograms for the equipment shall be provided. Suitable for - 20°C +50°C temperature range. (page 93) Please verify the suitable ambient temperature range.</p>	The rig will mainly be used in tropical conditions. Ambient temperature conditions between 10°C to 35°C

**SUPPLIER ACKNOWLEDGEMENT OF CLARIFICATION NO.2**

We, the undersigned hereby certify that the Clarification No.2 is an integral part of the document and the alterations set out in Clarification has been incorporated in the Tender Proposal.

Signed.....

Tenderer.....

Date.....