

### 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: 25th July, 2024

### Clarification No.4

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.4 as follows:

Requested Clarification	KenGen's Response
IADC is a membership association for Drilling	-
Contractors, Rig Manufacturers are not members of	
IADC. Thus it would be extremely difficult if not	
impossible to get a letter from IADC, where Rig	MR 5 has been waived.
Manufacturers are not members. We propose	
withdrawal of this mandatory requirements and or	
amendment to "Rig Manufacturers to secure letter(s)	
from Drilling Contractors, who they have supplied	
Drilling Rigs to and who are members of IADC."	
We also request that would you please kindly extend	
the tender closing date to August 31, 2024 as lot of	Refer to Addendum No.3 uploaded on our
issues still pending and even our proposed technical	website.
clarifications are still pending.	
The question is below:	The bidder shall provide <b>ALL</b> the necessary
	crews to assemble, test, commission,
3000meters well drilling will drilling by contractor by	training, drilling of two 3000m geothermal
himself or contractor will arrange engineer team to the	wells, rig move and rig up before rig hand
well site in Kenya training KenGen crew to complete	over as specified in the tender document.
the drilling 3000meters well?	
Please verify the responsibility of consumptive	KenGen shall provide the required drilling
materials as diesel, grease, hydraulic fluid etc during	materials during rig commissioning.
rig assembly, commissioning and drilling.	The manufacturer shall provide the
Please verify the work scope of bidder's team and	necessary lubricants and crew to assemble,
KenGen's team during rig assembly, commissioning	commission, rig move and drilling of the
and drilling.	two wells.
Please verify the type of LC, expected issue bank and	Refer to Addendum No.2 uploaded on our
negotiation document especially for milestone3~5.	website
The bidder/contractor shall be responsible of delivery,	The bidder/ manufacturer shall be
quality, service and spare parts in scope of whole	delivering all the spares enough for two (2)
tender equipment. Please clarify the scope of	years operations for ALL the equipment
equipment for which MAL are required.	offered in their bid document.
Please verify it's accepted for the TPI from any other	
international third party like DET NORSKE VERITAS	Provide as per the tender requirement
(DNV), Bureau Veritas (BV), France etc.	
Please confirm that required max operating height of	The max operating of power catwalk shall
power catwalk is 35' as per rig's drill floor height	be as per drill floor height 10.6m (35')
requirement.	

Draw-works 800kW (1074HP) /600V continuous power Can meet the requirements of hook load and	Maintain draw-works motor technical specifications as per the tender document		
hook speed			
Rotary table-800kW (1074HP) /600V continuous power Can meet the requirements of hook load and	Maintain rotary table motor technical specifications as per the tender document		
hook speed			
All Top drive suppliers only have 500T(4500KN) and			
750T(6750KN) in two Specification according API			
Standards. The 750T(6750KN) price is very High, we	Top drive capacity shall be minimum of 500		
suggest choice the 500T(4500KN) capacity and meet	tons (454 tonnes/ 1,000,000lb).		
the 2000HP Rig.			
Mud pump 800kW (1074HP) /600V continuous	Maintain mud pumps motors technical		
power Can meet the technical requirements	specifications as per the tender document		
Both capacities are mentioned in the tender and it's			
Conflicting:			
1, in the Overview, the Pill tank- 60m3 capacity			
2, in the specifications, Mud pill chamber is 15m3	The pill tank capacity is 15m <sup>3</sup>		
(100 Barrels) capacity Please to confirm which	The pin tank capacity is 15th		
capacity will be correct or it's different functions,			
please description.			
Tools and spares			
• Two (2) Chinese Brand pneumatic high torque nut			
runners for all the bolt and nut sizes used in the BOP			
systems.	This should Maintain as specified in the		
• Two (2) Chinese Brand electric high torque nut	tender document		
runners.			
• Two (2) sets Chinese Brand hydraulic CTST range of			
manual return Tentec topside bolt tensioning tools			
designed to fit ANSI B16.5, ANSI B16.47 Series 1,			
MSSSP44, API~6A and API~17D flanges.  13~5/8" BOP set			
Can we provide one Single ram BOP and one Double	This should Maintain as specified in the		
ram BOP instead of one Tripple ram BOP?	tender document		
Both are mentioned in the tender and it's Conflicting:	tender document		
1. Two 1000Hp (or one 2000hp) inverter duty			
1. Two footing (of one 2000mp) inverter duty			
equipped cage induction motor or an equipplent			
squirrel cage induction motor or an equivalent			
brushless motor capable of regenerative braking for			
brushless motor capable of regenerative braking for the draw works.			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump			
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brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive			
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).			
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brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via	The variable speed drive shall have sufficient power to drive draw-works,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for	sufficient power to drive draw-works,		
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brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:	sufficient power to drive draw-works, rotary table and mud pumps motors rated at		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW~WORKS  • Two (2) heavy duty splash-proof fully guarded (IP~	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS  • Two (2) heavy duty splash-proof fully guarded (IP-65), blower ventilated and continuous drive with	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS  • Two (2) heavy duty splash-proof fully guarded (IP-65), blower ventilated and continuous drive with constant torque AC cage VFD induction motors.	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS  • Two (2) heavy duty splash-proof fully guarded (IP-65), blower ventilated and continuous drive with constant torque AC cage VFD induction motors.  Minimum 1150 HP continuous and 1400 HP	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS  • Two (2) heavy duty splash-proof fully guarded (IP-65), blower ventilated and continuous drive with constant torque AC cage VFD induction motors.  Minimum 1150 HP continuous and 1400 HP intermittent, 3pH, 600V-690V.	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		
brushless motor capable of regenerative braking for the draw works.  2. One 1000Hp inverter duty squirrel cage induction motor for the rotary table.  3. Two 1000Hp (or one 2000hp) inverter duty squirrel cage induction motor for each mud pump (three mud pumps in total).  4. One 1000Hp inverter duty squirrel cage induction motor for the top drive or an equivalent brushless motor capable of regenerative braking (if the top drive systems are integrated with the power control room).  5. One spare panel fully functional panel rated for the highest-poared drive, and assignable via assignment cabinet.  The aforementioned requirements conflict with the following/specified requirements:  1.SECTION 1: DRAW-WORKS  • Two (2) heavy duty splash-proof fully guarded (IP-65), blower ventilated and continuous drive with constant torque AC cage VFD induction motors.  Minimum 1150 HP continuous and 1400 HP	sufficient power to drive draw-works, rotary table and mud pumps motors rated at minimum continuous power of 1150Hp,		

· Motor rating 840kW (1150Hp), 600V~690V 3.SECTION 4: MUD PUMPS AND HIGH~PRESSURE	
MUD LINES	
• Two (2) heavy duty splash-proof fully guarded (IP-	
65), blower ventilated and continuous drive with	
constant torque AC cage VFD induction motors.	
Minimum 1150 HP continuous and 1400 HP	
intermittent, 3pH, 600V~690V.	
The variable speed drive assignment cabinet will	
consist of several 3 phase contactors to assign different	
variable speed drive	
Adding a contactor transfer cabinet may increase	Maintain as specified in the tender
potential fault points. Therefore, our company can	document.
provide three additional sets of inverter modules as	
backups. If an inverter fails, these backup inverter	
modules can be used for prompt replacement.	
Rectifiers	The provided system shall have sufficient
If it needs to be fed back to the grid, are there any	filters for harmonic distortion. Bidders shall
requirements for the harmonics of the feedback	provide technical details of the system
current?	provided.
	Four (4) main CAT 3512B or 3512C
Please to confirm how many main generators.	generators and one (1) CAT C18 auxiliary
	generator (450-600kW).
All terrain 100-ton truck crane	
Automated gearbox Chinese brand, with 10 forward	Maintain as specified in the tender
speed and 2 reverse	document
the 1st and 2nd axle steering, 3rd and 4th axle drive	
All terrain 80-ton truck crane	
Automated gearbox Chinese brand, with 10 forward	Maintain as specified in the tender
speed and 2 reverse	document
the 1st and 2nd axle steering, 3rd and 4th axle drive	
Measurement While Drilling Equipment and Accessories	
Dual data surveys or equivalent specifications is	
VAROC Technical standards. The single data system is	Maintain the MWD specifications as per the
United States GE's communication protocols which is a	tender document specifications.
mud pulse and has no electromagnetic pulse.	tender document opecinications.
Request to confirm acceptance the GE specifications.	
Please clarify responsibility and the scope of work:	
1, Contractor will be dispatch key personal, such as	
Tool pusher, Driller, mud engineer, etc. Other	
auxiliary operation person will be arrangement by	Refer to Addendum No.3 Uploaded on our
KenGen.	website.
2, consumable such as Diesel oil etc. responsibility by	
KenGen.	
3, the accommodation, transportation and safety in the	
State of location during the service period	
responsibility by KenGen.	
The TPI company:	
Aberdeen Drilling Consultant, UK or Oil Field Audit &	
Service Inc., USA.	Third party inspection shall be as specified
The two companies could not be contacted, and one of	in the tender document.
the website can't be open. Could we can choose	
another TPI Company, such as DNV,BV,etc.	
We are going to participate in the bidding as JV	
together with other companies. The leader company is	The lead company MITOR11 d
a Group company specialized in rig manufacturing	The lead company MUST submit both the
with API certificates. Can the bid bond be issued by another member of the consortium?	bid security and the performance security. Both securities must indicate the lead
And in the event of winning, can the performance	company and the other members of the joint
guarantee, and prepayment guarantees be issued by	venture in accordance with their IV
Suaranice, and prepayment guaranices be issued by	V
	agreement.

another member of the consortium other than the	
leader company?	
Please confirm the valid period of the tender security.	The Tender security shall be valid for 30
Is it 30 days after Tender Closing Date (i.e. 30 days	days beyond the tender validity period ITT
after 2nd of August)?	clause 18.4. from the Tender Closing Date.
According to Stage 3: Financial Evaluation, Page No.	
33, it is stated that All schedules must be quoted for	
since all schedules will be awarded as a Lot.	
However, upon review and discussions with several rig	
manufacturers, some of the Schedules (e.g. tools and	
accessories) are specific to certain	The award shall be in LOT. Bidders SHALL
OEMs/Manufacturers and therefore wish to seek a	quote for all the schedules.
clarification to allow evaluation be conducted on a per	
schedule basis. This adjustment would accommodate	
the unique offerings of different manufacturers and	
ensure that each schedule is evaluated on its own	
merits.	
Kindly advise.	
Furthermore, if this is agreeable (Item No.1), the	
current tender security is punitive for those that can	
bid for the tools and accessories that are not considered	
part of the rig.	The Tender award shall be in LOT. Bidders
We therefore suggest that the bid bond of bidders who	must quote for all the schedules as provided
can only bid for specific sections be a percentage of a	in the tender document.
value advised by KenGen.	
Kindly advise.	
Assembly, Commissioning and Training in Kenya	The successful bidder shall assemble, test
Is it possible to wave the well drilling part and limit the	and commission the supplied rig by drilling
contractor's responsibility to supervision during well	two wells to 3000m as specified in the
drilling, walking, rig-down, move and rig-up.	tender document.

## SUPPLIER ACKNOWLEDGEMENT OF CLARIFICATION No.4

We, the undersigned hereby certify that the Clarification No.4 is an integral part of the document and the alterations set out in Clarification has been incorporated in the Tender Proposal.

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