



# KenGen

KENYA ELECTRICITY GENERATING COMPANY PLC

RFx: 5000009823

KGN-GDD-055-2022

## TENDER FOR SUPPLY OF SUBMERSIBLE PUMPS FOR OLKARIA II POWER STATION

(Citizen Contractors)

Date: 25th May 2022

### Clarification. 2

In accordance with the **Tender for Supply of Submersible Pumps for Olkaria II Power Station**, KenGen issues a clarification 2 as follows:

No.	BIDDERS CLARIFICATION REQUEST	KENGEN'S RESPONSE
1	<p>The submersible pump is under condition of long term operation, it is not effective to be portable (suggest Vertical turbine pumps).</p> <p>Question: Is it for long term operation?</p>	<p>Submersible pumps are for short term applications where the existing vertical line shaft pumps have failed or are unable to cope with influx of condensate. They are also suitable for applications where it is impractical to install other conventional pump types.</p>
2	<p>The initial investment of the portable submersible pump is small, but the motor is immersed in the liquid, and the temperature rise control and sealing requirements of the pump are relatively high, If these two aspects are not well controlled, the later maintenance costs are high.</p> <p>Question: Does an environment exist where the temperature fluctuations and sealing requirements are well controlled? (If not, suggest Vertical turbine pumps which are more robust)</p>	<p>Mostly we require submersible pumps in applications with constant temperature. Pumping geothermal condensate at constant temperature i.e., in draining cooling tower basins, draining manholes, draining U-seal pits, draining pipes etc. These are the typical applications.</p>
3	<p>Under normal circumstances the pH ranges between 2 and 5. Application temperature of fluids ranges between 30°C and 60°C. Under extreme but rare occurrence, the pump will be required to pump condensate at higher temperatures of up to 90°C. These working conditions will present a challenge for the motor temperature</p>	<p>We require submersible pumps for intermittent flooded applications that risk flooding existing Vertical line shaft pumps in the plant. During flooding, water temperature is about 40°C.</p>

	<p>rise and sealing of the submersible pump.</p> <p>Based on the above case scenarios, supplier suggested Vertical turbine pumps which remediate the above-mentioned issues.</p> <p>Question: Is this a scenario KenGen is willing to consider?</p>	
4	<p>Kindly provide us with information about;</p> <ol style="list-style-type: none"> <li>1. Pump output in terms of volume,</li> <li>2. Pumping height/head,</li> <li>3. Maximum heat that it will be handling (If possible)</li> </ol>	<p>Refer to the Tender technical specifications on page 57 and 58 of Tender Document and Clarification 1 (Item 4) concerning Maximum heat.</p>

**ACKNOWLEDGEMENT OF CLARIFICATION NO. 2**

We, the undersigned hereby certify that clarification is an integral part of the document and the alternations set out in the clarification have been incorporated in the tender proposal.

Signed.....

Tenderer.....

Date.....