



KenGen

KENYA ELECTRICITY GENERATING COMPANY PLC

KGN-BDD-017-2024

RFx: 5000015966

REQUEST FOR PROPOSAL FOR FEASIBILITY STUDY FOR OLKARIA II & WELLHEADS REDEVELOPMENT PROJECT (RE-TENDER)

(OPEN INTERNATIONAL)

Date: 15th November, 2024

Addendum No. 1

In accordance with the tender for “Request for Proposal for Feasibility Study for Olkaria II & Wellheads Redevelopment Project (Re-Tender)”, KenGen hereby issues Addendum No. 1 as follows:

1. EXTENSION OF TENDER CLOSING DATE

INITIAL TENDER CLOSING DATE	REVISED TENDER CLOSING DATE
Tender Closing Date: 21st November 2024 at 1000Hrs East African Time	Tender Closing Date: 5th December 2024 at 1000Hrs East African Time
Tender Opening Date: 21st November 2024 at 1000Hrs East African Time	Tender Opening Date: 5th December 2024 at 1000Hrs East African Time

2. REVISED SECTIONS OF THE RFP REQUIREMENTS

The following sections of the RFP requirements are revised as shown in the table below:

No.	INITIAL RFP REQUIREMENTS	REVISED RFP REQUIREMENTS
1	<p>Section 8: Special Conditions of Contract: GCC 6.3 Payment shall be made within Forty Five (45) days upon receipt of the Consultant's invoice. Payments shall be made according to the following schedule: Twenty (20) percent of the Contract Price shall be paid on commencement date against the submission of an on-demand advance payment bank guarantee of an equal amount from a reputable bank acceptable to the Client. Ten (20) percent of the lump-sum amount shall be paid upon submission of the interim report covering tasks 1-5 and Task 8 of the TOR Thirty (20) percent of the lump-sum amount shall be paid upon submission of the draft final report acceptable to the Client. Forty (40) percent of the lump-sum amount shall be paid upon approval of the final report. The accounts are: for foreign currency: [insert account] for local currency: [insert account]</p>	<p>Section 8: Special Conditions of Contract: Payment shall be made within Forty-Five (45) days upon receipt of the Consultant's invoice. Payments shall be made according to the following schedule: Twenty (20) percent of the Contract Price shall be paid on commencement date against the submission of an on-demand advance payment bank guarantee of an equal amount from a reputable bank acceptable to the Client. Twenty (20) percent of the lump-sum amount shall be paid upon submission of the interim report covering tasks 1-5 and Task 8 of the TOR Twenty (20) percent of the lump-sum amount shall be paid upon submission of the draft final report acceptable to the Client. Forty (40) percent of the lump-sum amount shall be paid upon approval of the final report. The accounts are: for foreign currency: [insert account] for local currency: [insert account]</p>
2	<p>Section 5: Terms of Reference 3.1.3 Feasibility Study for the proposed Redevelopment of Wellhead Units Power Plants i. Collect and collate relevant reports, data, and information for the wellheads power plants redevelopment study. Such data includes power plant as built drawings, monthly and annual reports, generation data, availability</p>	<p>Section 5: Terms of Reference 3.1.3 Feasibility Study for the proposed Redevelopment of Wellhead Units Power Plants i. Collect and collate relevant reports, data, and information for the wellheads power plants redevelopment study. Such data includes power plant as built drawings, monthly and annual reports, generation</p>

<p>data, capacity tests, steam and brine parameters, environmental audits and other relevant reports.</p> <p>ii. Analysis of geochemical and production well data.</p> <p>iii. Analysis of the Wellhead units plant components and systems, including but not limited to steam supply and reinjection, venting, mechanical, electrical, protection, control & instrumentation, supervision (DCS and SCADA), civil and structural systems and all other auxiliary systems.</p> <p>iv. Assess possible powerhouse site locations and develop a ranking criterion with recommendations for KenGen's concurrence.</p> <p>v. Undertake preliminary geotechnical and topographical assessment of the proposed site.</p> <p>vi. Review modern existing technologies for the use of geothermal steam in power generation, optimise wells allocated for wellheads plants and identify the appropriate technology or improvements that can be utilized during the redevelopment.</p> <p>vii. Produce conceptual designs for the power plants and steam gathering systems to guide the proposed redevelopment.</p> <p>viii. Prepare an overall budget and assess financing opportunities and implications for the redevelopment project.</p> <p>ix. Evaluate the electric power transmission system to confirm if the expected power output can be evacuated</p>	<p>data, availability data, capacity tests, steam and brine parameters, environmental audits and other relevant reports.</p> <p>ii. Analysis of geochemical and production well data.</p> <p>iii. Analysis of the Wellhead units plant components and systems, including but not limited to steam supply and reinjection, venting, mechanical, electrical, protection, control & instrumentation, supervision (DCS and SCADA), civil and structural systems and all other auxiliary systems</p> <p>iv. Based on findings in (iii) above, advise on rehabilitation requirements for wellheads power plants and estimate cost for rehabilitating the plants.</p> <p>v. Carry out a financial performance analysis of the existing wellheads power plants</p> <p>vi. Assess possible powerhouse site locations and develop a ranking criterion with recommendations for KenGen's concurrence.</p> <p>vii. Undertake preliminary geotechnical and topographical assessment of the proposed site.</p> <p>viii. Review modern existing technologies for the use of geothermal steam in power generation, - optimise wells allocated for wellheads plants and identify the appropriate technology or improvements that can be utilized during the redevelopment.</p> <p>ix. Produce conceptual designs for the power plants and steam gathering systems to guide the proposed</p>
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	<p>using the existing infrastructure and recommend alternative routes/ enhancements if necessary.</p> <p>x. Prepare the financial and economic analysis and carry out a Cost-Benefit Analysis (CBA) of the project over the project life.</p> <p>xi. Conduct an E&S risk screening and scoping study and then undertake an environmental and social impact assessment (ESIA) in line with relevant national legislation and in line with the applicable international standards and NEMA regulations.</p> <p>xii. Provide an implementation schedule for the redevelopment project taking into consideration the demand requirements for the power plant and reduction of revenue due to loss of power production.</p> <p>xiii. Prepare a bankable Feasibility Study Report;</p>	<p>redevelopment.</p> <p>x. Prepare an overall budget and assess financing opportunities and implications for the redevelopment project.</p> <p>xi. Evaluate the electric power transmission system to confirm if the expected power output can be evacuated using the existing infrastructure and recommend alternative routes/ enhancements if necessary.</p> <p>xii. Prepare the financial and economic analysis and carry out a Cost-Benefit Analysis (CBA) of the project over the project life.</p> <p>xiii. Conduct an E&S risk screening and scoping study and then undertake an environmental and social impact assessment (ESIA) in line with relevant national legislation and in line with the applicable international standards and NEMA regulations.</p> <p>xiv. Provide an implementation schedule for the redevelopment project taking into consideration the demand requirements for the power plant and reduction of revenue due to loss of power production.</p> <p>xv. Prepare a bankable Feasibility Study Report;</p>
3	<p>Section 5: Terms of Reference</p> <p>4.3.3 Redevelopment of the Wellhead Units Power Plant</p> <p>The consultant shall undertake the following:</p>	<p>Section 5: Terms of Reference</p> <p>4.3.3 Redevelopment of the Wellhead Units Power Plant</p> <p>The consultant shall undertake the following:</p>

- ~~a. The Consultant shall carry out an evaluation of the power plants and steamfield in its current condition. The Consult shall assess redevelopment options for the associated wells as per this TOR. The Consultant shall also suggest other feasible options to optimise the wells.~~
- ~~b. The consultant shall assess various sites for redevelopment of the Wellhead units, develop a ranking criterion for the sites from which the most feasible site shall be chosen.~~
- ~~c. Preliminary geotechnical and topographical studies. The geotechnical analysis shall use the existing data for development of civil work costs, including any earthwork and foundation costs, for the Project. The geotechnical investigation objective is to identify the general subsurface conditions at the site.~~
- ~~d. Review technology options that shall optimise steam consumption and maximise plant output. the consultant shall be expected to consider at least three technology options such as single flash, binary, screw expander technologies, dry/wet/hybrid cooling towers etc.~~

- a. The Consultant shall carry out an evaluation of the power plants and steam field in its current condition and propose rehabilitation requirements. Additionally, the Consult shall assess redevelopment options for the associated wells as per this TOR. The Consultant shall also suggest other feasible options to optimise the wells.**
- b. The consultant shall assess various sites for redevelopment of the Wellhead units, develop a ranking criterion for the sites from which the most feasible site shall be chosen.
- c. Preliminary geotechnical and topographical studies. The geotechnical analysis shall use the existing data for development of civil work costs, including any earthwork and foundation costs, for the Project. The geotechnical investigation objective is to identify the general subsurface conditions at the site.
- d. Review technology options that shall optimise steam consumption and maximise plant output. the consultant shall be expected to consider at least three technology options such as single flash, binary, screw expander technologies, dry/wet/hybrid cooling towers etc.

BIDDER'S ACKNOWLEDGEMENT OF ADDENDUM NO. 1

We, the undersigned, hereby certify that the addendum is an integral part of the document and the alterations set out in addendum have been incorporated in our tender document.

Signed

Tenderer

Date