



# KenGen

Kenya Electricity Generating Company PLC

## EXPRESSION OF INTEREST (EOI) FOR CONSULTANCY SERVICES FOR THE FEASIBILITY STUDY OF MAJOR HYDROPOWER PLANTS REHABILITATION

(OPEN INTERNATIONAL)

EOI REFERENCE No.: KGN-BDD-018-2024

The Kenya Electricity Generating Company PLC (KenGen) invites expressions of interest from eligible consultancy firms to conduct a Feasibility Study for the rehabilitation of its major hydropower plants.

### 1. BACKGROUND GENERAL INFORMATION

KenGen is the leading electric power producer in Kenya, accounting for 62% of the total electric power supplied to the National Grid, with a total installed capacity of 1,726.19 MW. This comprises Hydropower (825.69 MW), Geothermal (755 MW), Thermal (120 MW), and Wind (25.5 MW). KenGen manages nine major Hydropower Plants (HPPs) as tabulated below. These plants were constructed between 1954 and 2012, and their operational capabilities are critical to the stability and sustainability of Kenya's energy supply.

Hydro Power Plant Name	Region	County	Installed Capacity (MW)	Year of Commissioning /Rehabilitation
1. Tana	Upper Tana	Muranga	14.4/20**	1954/2011*
2. Masinga	Eastern Hydros	Machakos	44	1981
3. Kamburu	Eastern Hydros	Machakos	94.2	1974
4. Gitaru	Eastern Hydros	Embu	225	1978
5. Kindaruma	Eastern Hydros	Embu	44/72**	1968/2012*
6. Kiambere	Eastern Hydros	Embu	144/168**	1988/2011*
7. Turkwel	Western Hydros	West Pokot	106	1991
8. Sondu Miriu	Western Hydros	Kisumu	60	2008
9. Sangoro	Western Hydros	Kisumu	21.2	2012

With rising peak load demands and the increasing integration of intermittent renewable sources, KenGen plans to undertake a comprehensive feasibility study to assess the technical, economic, and financial viability of rehabilitating its major hydropower plants. This will facilitate the negotiation of a new Power Purchase Agreement (PPA) to extend the operational lifespan of these facilities.

### 2. SCOPE OF THE FEASIBILITY STUDY

The consulting services (“the Services”) will be for an estimated period of **10 months**. The scope of services includes but is not limited to the following:

- 1) Performance Evaluation: Analyse the operational performance of the major hydropower plants during the current PPA period, comparing initial assumptions with actual performance metrics.
- 2) System assessment to determine the suitability for rehabilitation based on the future plan (LCPDP)
- 3) Regulatory assessment to highlight the main regulatory changes and how to incorporate them into the new PPA

- 4) Condition Assessment: Evaluate the current condition of each power plant and identify specific rehabilitation requirements, including cost estimates for necessary upgrades.
- 5) Rehabilitation Strategy: Develop and recommend a rehabilitation schedule for each power plant, detailing expected enhancements in operational lifespan and performance, particularly in relation to ancillary services.
- 6) Financial and Economic Analysis: Conduct a detailed financial and economic assessment of the proposed new major hydro PPA, including the development of a tariff structure that meets revenue requirements.
- 7) Risk Analysis: Identify potential risks associated with the rehabilitation project and recommend suitable mitigation strategies.
- 8) Implementation Plan: Create a comprehensive project implementation plan that outlines timelines, milestones, and key performance indicators for monitoring progress.

### **3. ELIGIBLE FIRM PROFILE**

Consultants responding to this EOI should be from an individual firm or a consortium (with one firm designated as the lead). The consultant team must have demonstrable experience in conducting feasibility studies for hydropower plant rehabilitation, including design, engineering, and project management. It is expected that foreign consulting firms will partner with local consultants to ensure capacity building and compliance with local content regulations.

### **4. EVALUATION CRITERIA**

Shortlisted consulting firms will be selected based on detailed references (or letters of commendation) for successfully completed feasibility studies, along with certified CVs of key staff. Interested consultants must demonstrate the following minimum criteria:

- 1) Demonstrate experience in conducting feasibility studies for hydropower plant rehabilitation. A minimum of 10 years' experience in the design, engineering, and operation of hydropower plants.
- 2) Have undertaken at least one feasibility study assignment for a rehabilitated hydro power plant of at least 100MW which is in operation in the last 10 years
- 3) Availability of professional staff in key disciplines, including Hydropower Engineering, Financial Analysis, Hydrology, and Risk Management.
- 4) Detailed CVs of key team members must be attached.

Selection will follow the Quality and Cost-Based Selection (QCBS) method as set forth by KenGen. The detailed Terms of Reference (TOR) for the assignment can be found at the following website: [www.kengen.co.ke](http://www.kengen.co.ke)

### **5. DOCUMENTS TO BE SUBMITTED**

Interested firms must submit the following documentation:

- a) Evidence demonstrating that the firm(s) meets the requirements outlined in sections 3.0 and 4.0.
- b) Certificate of Incorporation/Registration.
- c) Certified copies of the Memorandum and Articles of Association for all consortium members.
- d) A duly notarized Consortium Agreement (if applicable).
- e) Power of Attorney designating the Team Lead of the consortium (if applicable).
- f) Audited Financial Statements for the last three (3) years, including tax registration and compliance certificates.
- g) List of consultancy services related to hydropower rehabilitation undertaken in the last five years, with reference letters and project descriptions.
- h) Company profile, including roles of consortium members (if applicable).

- i) Consultants may associate with other firms to enhance their qualifications but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.
- j) Information regarding any current litigation involving the consulting firm, certified by a reputable law firm.

## 6. CLARIFICATIONS

Interested firms may submit requests for clarifications on this EOI up to ten (10) days before the submission deadline. Updates on this EOI will be posted on the KenGen website (<http://www.kengen.co.ke/tenders>).

Clarification requests should be directed to:

**General Manager, Supply Chain**  
**Kenya Electricity Generating Company PLC,**  
**KenGen RBS Building, 9th Floor next to Stima Plaza III**  
Kolobot Road, Parklands  
P.O. Box 47936 – 00100,  
Nairobi, Kenya.  
Tel: +254-20-3666427 / +254-20-3666421  
Email: [tenders@kengen.co.ke](mailto:tenders@kengen.co.ke)  
CC: [mogonji@kengen.co.ke](mailto:mogonji@kengen.co.ke); [fkamanja@kengen.co.ke](mailto:fkamanja@kengen.co.ke)

## 7. EOI SUBMISSION

**Three (3) copies of the EOI must be submitted—ONE (1) “ORIGINAL” marked as such, and TWO (2) marked “COPY” in separate sealed envelopes. Each envelope should be clearly marked: KGN-BDD-018-2024 - EXPRESSION OF INTEREST (EOI) FOR CONSULTANCY SERVICES FOR THE FEASIBILITY STUDY OF MAJOR HYDROPOWER PLANTS REHABILITATION and submissions should be delivered to:**

**General Manager, Supply Chain,**  
**Kenya Electricity Generating Company PLC,**  
**KenGen RBS Building, 10th Floor next to Stima Plaza III,**  
**Kolobot Road, Parklands**  
**P. O. Box 47936 - 00100,**  
**Nairobi, Kenya.**  
**Tel: + 254 20 3666708; Fax: +254 20 248848**

**Deadline for submission: 26<sup>th</sup> November 2024 at 10.00 a.m.**

The EOI will be opened on **26<sup>th</sup> November 2024** at 10.30 a.m. in the presence of representatives from interested firms.

The EOI can also be viewed and downloaded from the KenGen website: [www.kengen.co.ke](http://www.kengen.co.ke) . Bidders are advised to be checking the websites from time to time up to three (3) days before closing date for any uploaded information through clarification/addendum.

The bid document must be dropped in the tender box located on the ground floor of Stima Plaza Phase III.

Only firms prequalified under this procedure will be invited to submit proposals. KenGen reserves the right to accept or reject any or all applications.

GENERAL MANAGER SUPPLY CHAIN