

## REQUEST FOR EXPRESSIONS OF INTEREST (EOI)

**KGRTC/PIU/EOI No.1-2014: "EXPRESSIONS OF INTEREST FOR SHORT-LISTING OF ENGINEERING CONSULTING FIRMS TO UNDERTAKE FEASIBILITY STUDY AND PREPARATION OF TENDER DOCUMENTS FOR DEVELOPING A SMALL HYDROPOWER STATION AT KAFUE GORGE, IN NAMALUNDU, CHIKANKATA DISTRICT, SOUTHERN PROVINCE, ZAMBIA"**

### 1. BACKGROUND

- 1.1. Kafue Gorge Regional Training Centre (KGRTC) was established in 1989 by SADC Energy Ministers, to offer specialized training in hydropower and related engineering disciplines. The Centre is a registered Trust in Zambia and is governed by a Board of Trustees drawn from Malawi, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. KGRTC has earned international reputation in the provision of quality training and excellent conference facilities. The Centre is located in Namalundu, 100 km south of Zambia's Capital City Lusaka, off Chirundu road, in the vicinity of one of Zambia's largest hydropower stations, Kafue Gorge Power Station in Namalundu.
- 1.2. KGRTC has sourced funds from the Swedish Government for Business Development Phase I of KGRTC, and intends to apply part of the funds towards Consultancy Services to undertake feasibility studies and preparation of tender documents for the construction of a Small Hydropower Station in Namalundu.
- 1.3. KGRTC intends to engage reputable Consulting Firms to provide engineering consultancy services comprising: carrying out a feasibility study and preparation of tender documents for the construction of a Small Hydropower Station and other facilities in Namalundu.
- 1.4. Interested Firms that intend to respond to this invitation for Expressions of Interest should submit their application providing all the information required therein to the address mentioned in this invitation for Expressions of Interest within the time period specified.

### 2. OBJECTIVE OF THE ASSIGNMENT

- 2.1. The objective of this assignment is to procure an engineering Consultant to carry out a feasibility study and prepare tender documents for the construction of a Small Hydropower Station and other facilities at Kafue Gorge, through provision of comprehensive and quality engineering consulting services.

### 3. DESCRIPTION AND SCOPE OF THE ASSIGNMENT

- 3.1. KGRTC is executing the Project on behalf of the Board of Trustees and is fully mandated to explore all procurement methods. The project main features include the following:
  - 3.1.1. Undertaking feasibility study to develop an optimized full basic design for a Small Hydropower Station at Kafue Gorge along the Kafue River, of appropriate installed capacity with a reasonable construction cost and construction period.
  - 3.1.2. Preparation of tender documents to facilitate procurement of an Engineering Procurement and Construction (EPC) Contractor for the Small Hydropower Station.
- 3.2. Underlying objectives of the Project will be to ensure the following:
  - 3.2.1. Construction of the Small Hydropower Station in the shortest possible time with optimum resources.
  - 3.2.2. Developing institutional framework at KGRTC for sustainable hydropower development and use.
- 3.3. The appointment of the Engineering Consultant shall be based on technical competence and proven track record.

### 4. TERMS OF REFERENCE

- 4.1. Interested Consultants should provide and submit detailed information indicating that they are qualified to undertake the assignment.
- 4.2. Experience within the last ten (10) years in the following aspects:
  - 4.2.1. Undertaking feasibility studies for hydropower development covering Collection, review and updating of data; Power Market evaluation; evaluation of Socio-Economy; Field Investigations; Meteorological and Hydrological Analysis; Sedimentation assessment; Topographical Surveys and assessment; and Geological investigations and analysis.
  - 4.2.2. Detailed project report writing covering selection and sizing of equipment/plant/system design parameters and operating features, development of conceptual layouts for hydro power plants, associated auxiliary equipment and balance of plant, piping and instrumentation diagrams and detailed optimisation studies.
  - 4.2.3. Basic and detailed engineering design as Supervision/Owners' Engineer in at least three (3) similar projects, with unit sizes not less than 5 MW including balance of plant equipment along with associated civil, mechanical, electrical, communications, control and instrumentation, which have successfully been executed and commissioned within the last ten (10) years. The applicant must state the following:
    - a) Name of Client to which service/assignment of similar nature was provided, including names and contact details of client's representatives who may be contacted for verification;
    - b) Name, Location, Description, Value and Duration of the project or assignment undertaken, especially in Africa.
  - 4.2.4. Management of Engineering Procurement and Construction contract tender process – bidding, document preparation, pre-bid meetings, evaluation and contract award.
- 4.3. Composition of the Consultant's Team including experience and minimum qualifications for key personnel:
  - 4.3.1. Team Leader – at least ten (10) years of relevant experience at top management level in hydro power infrastructure development projects, with minimum Masters' degree in Engineering.
  - 4.3.2. Civil Engineer – at least eight (8) years of experience in hydropower planning with geotechnical engineering background, with minimum Bachelor's degree in Civil Engineering.
  - 4.3.3. Hydrologist – at least eight (8) years of experience in water resources planning with knowledge of designing hydropower plants, with Bachelors degree in Civil/Hydrology/Water Engineering.
  - 4.3.4. Electrical Engineer – at least five (5) years experience in power supply and control systems, and commissioning of hydropower plants, with minimum Bachelor's degree in Electrical Engineering.
  - 4.3.5. Mechanical Engineer – at least five (5) years of specific experience with an in depth knowledge in hydraulic equipment and hydropower systems, with minimum Bachelor's degree in Mechanical Engineering.
  - 4.3.6. Geo-technical Engineer – at least ten (10) years of specific experience with in depth knowledge in geotechnical engineering, with minimum Bachelor's degree in Civil/Geo-technical Engineering.
  - 4.3.7. Environmental Scientist – at least eight (8) years of experience in environmental planning and management in hydropower development, with minimum Bachelor degree in Environmental Engineering/Science or other relevant field.
- 4.4. Information on the Firm's capacity to undertake the assignment with the following details:
  - 4.4.1. Certification of Incorporation/Registration and Membership/Accreditation to relevant renowned professional bodies. Letters of association with other Consultants shall be provided for joint venture.
  - 4.4.2. Financial capacity to carry out the assignment (submit independently audited financial statements for the last five years from the year 2013).
  - 4.4.3. Litigation status from consultant's advocates or notary republic. (Note: Written statement from the Consultant will not be acceptable.)
  - 4.4.4. The firm's company profile, detailing shareholding structure; Directors and the firms' representatives (if any), the Name, Nationality, Address, Telex/Telephone and Facsimile/E-mail.

### 5. CLARIFICATIONS

- 5.1. All requests for clarifications from interested Consulting Firms concerning this invitation for Expression of Interest must be addressed to The Director, Kafue Gorge Regional Training Centre, P.O. Box 32774, LUSAKA, Zambia, Telephone: +260 211 371007/8, Email: [piu@kgrtc.org.zm](mailto:piu@kgrtc.org.zm). Receipt of clarifications shall be closed seven (7) days before the closing date. This Invitation for Expression of Interest can also be accessed on the KGRRTC website at [www.kgrtc.org.zm](http://www.kgrtc.org.zm)
- 5.2. KGRTC may request the Applicant for any clarifications during evaluation of the Expressions of Interest. The Applicant shall furnish the necessary clarifications expeditiously by post/courier/fax/email or by any other fastest means of communication to KGRTC at the address given. Failure to provide information essential to evaluate the Applicant's qualifications, or to provide timely clarifications or substantiation of the information furnished, will render such offers as non-responsive. A bidder shall not participate in two different consortiums in this tender and a person shall not submit a bid in that person's own names and as part of the consortium. Failure to comply will render the Consultant non-responsive.

### 6. SUBMISSION

- 6.1. Four (4) copies of the Expressions of Interest from eligible and interested Consultancy Firms who wish to participate in this Consultancy Service, including the original, must be submitted in a sealed envelope, clearly marked "EXPRESSION OF INTEREST FOR SHORT-LISTING OF ENGINEERING CONSULTING FIRMS TO UNDERTAKE FEASIBILITY STUDY AND PREPARATION OF TENDER DOCUMENTS FOR DEVELOPING A SMALL HYDROPOWER STATION AT KAFUE GORGE, NAMALUNDU, CHIKANKATA DISTRICT, SOUTHERN PROVINCE, ZAMBIA". The sealed Expressions of Interest must be addressed to The Director, Kafue Gorge Regional Training Centre, P.O. Box 32774, LUSAKA, Zambia and deposited in the Tender Box at KGRTC, Plot No.1234M, Namalundu, Kafue Gorge, Zambia on or before Friday 25<sup>th</sup> July 2014 at 10:30 hours local time. **Late submissions and submissions by email and telefax will not be accepted.**
- 6.2. The Expression of Interest applications will be opened immediately thereafter at the Straw Hut situated at KGRTC in the presence of applicants or their representatives who choose to attend. Only shortlisted applicants will be invited to obtain the detailed Request for Proposals (RFP) for further submission.