



REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES – FIRMS SELECTION)

Prefeasibility Studies for the Development of the Proposed Devil's Gorge Hydro Electric Scheme

Country: Zambia and Zimbabwe

Assignment Title: Prefeasibility Studies

Project: Devil's Gorge Hydro Electric Scheme

Reference No: ZRA-DGHES-C-01-2022

1. The Zambezi River Authority (“**the Authority**”) has set aside funds to finance various projects during the 2022 financial year. It is intended that part of the proceeds of the funds will be used to cover eligible payments for the provision of consultancy services to undertake prefeasibility studies for the **Development of the Proposed Devil's Gorge Hydro Electric Scheme**. In the execution of the services, the consultant shall cooperate and liaise with the Authority, the Executing Agency (EA) of the project.
2. The Authority is a corporate body jointly and equally owned by the Governments of Zambia and Zimbabwe (“**Contracting States**”) and is mandated with the management of the Kariba Complex and the stretch of the Zambezi River (from Kazungula to Kanyemba) forming a common border between the two Contracting States.
3. The proposed Devil's Gorge Hydro-Electric Scheme (HES) is located at the tail end of Kariba Dam, downstream of the Gwayi/Zambezi Rivers Confluence.

The Devil's Gorge HES was conceived in 1972 out of a study instituted by the predecessor of Zambezi River Authority, Central African Power Corporation

(CAPCO). The aim of the study was to identify possible power sources in terms of which the intergovernmental institution could develop to meet the power demands of Zambia and Zimbabwe. Its recommended scheme included a 181 m high concrete arch dam, 65m of which are below the water level of the river, two underground power stations on each side of the river with a total capacity of 1240 MW for the scheme. The normal retention level of EL 595 was selected creating a reservoir of 33 billion m³.

In 1992-93, a feasibility study, on the Batoka Gorge Hydroelectric Scheme, was commissioned by the Authority during which the Devil's Gorge Scheme was looked at in greater detail and reserved as one of the potential sites for future development.

In addition, the Authority requested Tractebel Engineering S.A - France (TEF) to undertake an analysis of the Devil's Gorge Project in 2016. No Environmental and Social Impact Assessment (ESIA) has been conducted to date.

4. The objective of the assignment is to undertake prefeasibility studies that would investigate and recommend an optimal site, around the stretch between approximately 60km downstream of the proposed Batoka Gorge site and upstream of the area of influence of Lake Kariba (map supplied in the terms of reference). The initially recommended site shall also be analysed and compared with the other alternatives.
5. The high-level scope of the consulting services ("**the Services**") to be implemented over a period of approximately **thirty weeks** shall include;
 - a.) Review all available previous documentation on the Devil's Gorge HES
 - b.) Supplement the study's review with focused and limited field investigations and tests required to firm up the scope of the proposed works. These shall include limited geotechnical investigations.
 - c.) Identify possible alternative optimal sites for the location of the Dam taking into account the findings of the technical, geotechnical, environmental, social and economic considerations. From the long list of alternative sites, two shall be recommended, analysed in detail and ranked based on a multi criteria to be agreed with the client.
 - d.) Propose an optimal installed capacity, informed by technical, environment, social and economic considerations
 - e.) Propose an optimal configuration of the scheme considering the bilateral nature of the project.

Prepare a detailed design report describing the scope of the proposed works, and clearly showing the design criteria adopted, assumptions made and the corresponding calculations. Confidential cost estimates of the works as well as an implementation schedule shall also be prepared and included in the report. The report shall be discussed with the executing agency

The Draft Terms of Reference for the Consulting Services can be inspected on the Authority's website: www.zambeziira.org

6. The Authority now invites consulting firms ("**Consultants**") with similar and specific experience to express their interest in providing the said services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

The shortlisting criteria is;

- (i) The firms core business being in the area of the proposed assignment,
- (ii) General experience of the firm (clearly demonstrating the scope, cost and duration),
- (iii) At least 10 years' specific experience with internationally financed projects. Solid (more than 5 years) experience with administrative, procurement, and financial procedures of the of international financing institutions and the Government of Zambia and Zimbabwe.
- (iv) Proven track record of delivery of implementation manuals for comparative projects. The consultant should have carried out at least 3 related assignments in the last 15 years.
- (v) Suitability of the qualifications and experience of the Consultants core staff, such as principals or directors who may not at all be proposed subsequent to short listing to be among the key staff of the consultants who may be proposed to undertake the assignment. Specific Key Experts requirements will be considered in the Request for Proposal Stage.

The assignment is likely to start in September 2022 and is expected to be implemented over approximately thirty weeks.

The Consultant will be selected in accordance with the **Quality and Cost Based Selection** method set out in the Authority's Procurement Policy and Procedures Manual.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications.

Further information can be obtained at the address below during working hours from 0800 hours to 1630 hours local time or Email: Langton.Pfaira@zambeziira.org

7. Expressions of interest shall be submitted by **E-MAIL ONLY** in **PDF** on or before **28th June 2022, 1600hrs** on the following **E-mail address**.

Email: dghes@zambezi.org

The Expressions of interest must be addressed to;
The Chief Executive
Zambezi River Authority
Kariba House, 32 Cha Cha Cha Road
Lusaka, Zambia.
Tel.: +260 211 227970-3

Att: Manager Procurement