



REQUEST FOR EXPRESSIONS OF INTEREST FOR THE PROVISION OF CONSULTING SERVICES FOR THE PRELIMINARY GEOSCIENTIFIC SURFACE STUDIES FOR THE CHONGO GEOTHERMAL POWER PLANT IN MPIKA, MUCHINGA PROVINCE - ZESCO/EOI/104/2022

ZESCO Limited is a vertically integrated Zambian power utility company, which is wholly owned by the government of the Republic of Zambia (GRZ) through the Industrial Development Corporation (IDC). The power utility is mandated to generate, transmit, distribute, and supply electricity in a reliable and efficient manner to local and international markets.

PROJECT BACKGROUND

ZESCO Limited has embraced energy mix as a solution to the climate challenges that the nation, the region, and the world is facing. Geothermal resource offers a sustainable and climate change resilient renewable energy solution that can support power generation mix in the country as well as improve access to electricity. Zambia's strategic move in energy security is to diversify from over reliance on hydropower to alternative energy sources that are less affected by the impact of climate change.

Zambia belongs to the western branch of East African Rift System (EARS) which develops from Uganda throughout Lake Tanganyika, where it joins the Eastern branch, following the border between Rwanda and Democratic Republic of Congo (DRC) (Legg, 1974). Zambia does have EARS associated geology and geothermal systems in the Northern part of the country.

The western branch is characterized with low enthalpy and much less active in terms of volcanism although both branches are seismically and tectonically active today. Potential exists for the utilisation of geothermal energy resources to generate electricity and to meet energy requirements in both urban and rural areas of Zambia.

According to the countrywide geothermal resource assessment study conducted in 1987 through the Geological Survey Department of Zambia (GSD), Chongo, Kapishya, Lubungu, Chinyunyu, Lupiamanzi, Chikowa, Chinyunyu and Kasho were among seven (7) promising sites considered for detailed investigations. Of the seven promising sites, Chongo had the highest surface temperature at 87°C.

Previous studies also indicated that the site had comparatively higher geo-thermometric temperatures. However, Chongo was eventually not developed due to social economic reasons. Chongo hot spring located in Munyamadzi Game Management Area (GMA) in the Luangwa valley is being investigated for the development of geothermal power generation.

Reconnaissance geoscientific surveys involving geochemical, geological, and geophysical

investigations were conducted at Chongo site in November 2019. The exploration studies coordinated by ZESCO, were led by a team of experts from GSD and the National Institute for Scientific and Industrial Research (NISIR).

It is against this background that ZESCO intends to engage a Consulting firm to conduct the Preliminary Geoscientific surface studies for the geothermal power project at Chongo site. The output of the study must meet international standards for the project to receive financing support for the next phase, such as the Geothermal Risk Mitigation Facility (GRMF).

LOCATION AND ACCESS

Chongo geothermal site is located in Muchinga Province, in Nabwalya area of the Luangwa Valley. It can be accessed by road from Mpika town in Muchinga province and/or from Chipata city or Lundazi town located in eastern province. The site is in the GMA, between north and south Luangwa national parks and requires escort by fully equipped park rangers.

OBJECTIVE OF ASSIGNMENT

The objective of the Preliminary surface study is the evaluation of the geothermal prospects at Chongo hot springs through evaluation of all existing information and field reconnaissance with the purpose of selecting smaller areas of interest and of defining further exploratory steps. The specific objectives of the study are:

- a) To conduct preliminary evaluation of geothermal resource around Chongo hot springs.
- b) To select smaller of areas of interest for the detailed geothermal exploration program.
- c) To define a geothermal conceptual model and develop a detailed exploration program for selected areas of interest for the resource.

ZESCO Limited now invites eligible consultants to indicate their interest in providing the services. Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). Consultants may associate to enhance their qualifications and/or capabilities. The short-listing criteria include but not limited to the following: *(a) having experience in the project area (b) the similar nature of work experience required; (c) adequacy for the assignment; and (d) experience in the region.*

A Consultant will be selected in accordance with the ***Quality and Cost Based Selection (QCBS)*** method as prescribed in the Public Procurement Regulations of 2022.

Interested consultants may obtain further information from the undersigned, during office hours, 08:00 to 12:30 hours and from 14:00 -16:30 hours, local time (CAT) using contact information as follows: telephone number is +260-211-362314 The email address is procurement@zesco.co.zm and felixmunsaka@zesco.co.zm

The Expressions of Interest should be deposited in the tender box located on the Ground Floor Main Entrance, LDCC Building Procurement Offices P.O. Box 33304 10101, Lusaka, Zambia, clearly marked "***Expressions of Interest for the Provision of Consulting Services for the Preliminary Geoscientific Surface Studies for the Chongo Geothermal Power Plant in Mpika, Muchinga Province for – ZESCO/EOI/104/2022***" in sealed envelopes and addressed to the Managing Director, ZESCO Limited, Stand No. 6949, Great East Road, Lusaka, Zambia, not later than **Friday, 10th February, 2023 at 10:30** hours local time. HOWEVER, TELEFAX OFFERS WILL NOT BE ACCEPTED.

The Expressions of Interest shall be opened immediately thereafter in the Boardroom of the **Procurement Division** in the presence of applicants or their representatives who choose to attend.

**FELIX MUNSAKA
ACTING HEAD PROCUREMENT
FOR/MANAGING DIRECTOR
ZESCO LIMITED**