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**United States Energy Association
Power Africa: A U.S. Government-Led Partnership to Increase Sub-Saharan Africa’s Access to Energy
Request for Proposal – Olkaria Reservoir Management Consultancy**

REQUEST FOR PROPOSAL – Olkaria Reservoir Management Consultancy

Closing date of RFP: Friday, June 1, 2018

Implementing Organization: United States Energy Association

Funding Agency: United States Agency for International Development

Award Ceiling: \$35,000.00

The United States Energy Association (USEA) is inviting prospective organizations or individuals through this Request for Proposal (RFP) to submit proposals for a consultancy on the present conceptual and numerical models of the Olkaria geothermal field in Kenya with an aim of advising on the accuracy of the models and to identify areas of improvement. This is an activity implemented by USEA, funded by the United States Agency for International Development (USAID) as part of the Power Africa Initiative.

Proposals are due by 17:00 hours EST of the closing date. Please forward your proposal in soft copy (PDF form) to Ms. Caity Smith, Senior Program Coordinator, at csmith@usea.org

As this is a USAID-funded program, the RFP follows USAID Procurement Regulations and Laws. All bidder details will be kept confidential.

I. INTRODUCTION

The U.S. Energy Association (USEA) is the U.S. Member Committee of the World Energy Council (WEC). Headquartered in Washington, DC, USEA is an association of public and private energy-related organizations, corporations, and government agencies.

Through a cooperative agreement with the USAID Bureau for Economic Growth, Education and Environment (E3), USEA implements the Energy Utility Partnership Program (EUPP), available to all USAID-assisted countries and USAID Missions. EUPP supports the efforts in USAID-assisted developing countries to increase environmentally sustainable energy production and to improve the operational efficiency and increased financial viability of their utilities and related institutions, with the goal of increasing the access of these countries to environmentally sound energy services.

USEA conducts a number of activities under the EUPP mechanism for Power Africa - a U.S. Government-led partnership to increase Sub-Saharan Africa’s access to energy. Power Africa uses a wide range of U.S. government tools to support investment in Africa’s energy sector. From policy and regulatory best practices, to pre-feasibility studies and capacity building, to long-term financing, insurance, guarantees, credit enhancements and technical assistance, Power Africa provides coordinated support to help African partners expand their generation capacity and access.

The U.S.-East Africa Geothermal Partnership (EAGP) is a public-private partnership between the U.S. Agency for International Development (USAID) and the Geothermal Energy Association (GEA), implemented by the U.S. Energy Association (USEA). It was established in September 2012 to promote the development of geothermal energy projects and increase private sector investments in geothermal in East Africa. It also encourages and facilitates the involvement of the U.S. geothermal industry in the region. With an estimated 15,000 MW of potential geothermal capacity in East Africa - a clean, reliable, baseload power solution – geothermal energy is critical to East Africa’s economic development especially as a base-load power source.

II. BACKGROUND

Geothermal potential in Kenya is estimated to be between 7,000 – 10,000 MWe, located along the East African Rift. Exploration of the Olkaria Geothermal Field began in 1956, with deep drilling commencing in 1973. Since that time, numerous geothermal wells have been drilled and KenGen has installed and is currently operating a total of 531 MWe of geothermal energy. As part of Kenya’s “Good to Great” strategy, KenGen plans to add an additional 500MW of geothermal energy generation to the Olkaria field by 2023. While preparing for this rapid increase in production, there is a need for accurate reservoir modeling to ensure that the development of the reservoir is sustainable. KenGen has worked with numerous outside consultants and international aid agencies to build and improve the reservoir model for Olkaria, however with the recent and planned accelerated development, a need has been identified to have the past reservoir modeling work reviewed and verified.

Kenya Electricity Generating Company Limited Overview: Kenya Electricity Generating Company, Ltd (KenGen) was incorporated on February 1, 1954 under the Companies Act (Chapter 486 of the Laws of Kenya) as Kenya Power Company (KPC) to construct the transmission line between Nairobi and Tororo in Uganda as well as to develop geothermal and other generating facilities in the country. Since its inception, KPC sold electricity in bulk at cost to Kenya Power under a management contract.

Following the energy sectoral reforms in 1996, the management of KPC was formally separated from Kenya Power and renamed KenGen in January 1997. In 2006, KenGen was listed on the Nairobi Securities Exchange after the Government of Kenya sold 30% of its stake in the company through a very successful Initial Public Offer (IPO).

KenGen owns over thirty power generating plants with a combined installed capacity exceeding 1,300MW from diverse generation modes comprising of hydro, thermal, geothermal and wind technologies.

III. SCOPE OF WORK

The purpose of this RFP is to solicit proposals from various candidate organizations, conduct a fair evaluation, and select the organization deemed most suitable to conduct the consultancy.

USEA plans to arrange for one trip to Nairobi and Naivasha, Kenya, not to exceed ten (10) working business days with a weekend break, for meetings with KenGen management and the Olkaria reservoir team to review the current conceptual and numerical reservoir models and data. During this time, the Consultant(s) will work closely with the KenGen team to review the present models with the aim of advising on their accuracy, and to identify potential areas of improvement. Key points of interest for potential improvement include: feasibility of planned expansions; impact on the reservoir of in-field cold reinjection; possible economic impact of additional condensate recovery cycles; and best practices for knowledge transfer between staff.

After the initial trip to Kenya, the Consultant(s) will work remotely to prepare a report summarizing the meetings and communications that took place with KenGen staff. This report will also analyze the models and make any recommendations for changes to the model or practices to ensure the sustainability of the reservoir. If there are

recommendations for further trainings or assistance based on the findings of this consultancy, they will be outlined at the conclusion of the report.

IV. SCHEDULE

The final report from this consultancy must be submitted to and approved by USEA no later than September 14, 2018.

V. DELIVERABLES

The following deliverables are anticipated:

- Conduct on-site assessment in Kenya for up to ten (10) working business days;
- Final report to include the following:
 - Summary of meetings and communication with KenGen staff;
 - Summary of major strengths and weakness of the current models for the Olkaria geothermal reservoir;
 - Recommendations for areas of improvement in the models;
 - Guidance on identified topics of interest for improvement;
 - Recommendations for additional training or assistance as appropriate.

USEA will be responsible for all logistical arrangements, including:

- All travel related logistics and costs for the consultant(s), in compliance with Fly America Act and the Federal Travel Regulations; this includes:
 - Roundtrip economy airfare;
 - Meals and Incidental Expenses stipend, calculated according to the Federal Travel Regulations, and using U.S. Department of State rates;
 - Visa costs;
 - Airport transfers;
 - Lodging;
 - Health and accident coverage.
- Meeting venue.

VI. PROPOSAL CONTENT

The proposal must contain the following:

- a) A cover letter to the proposal;
- b) A technical proposal, including:
 - Proposed work plan and methodology;
 - Description of past work on conceptual and numerical reservoir modeling;
 - A timeline for this consultancy, including proposed travel dates.
- c) A financial proposal, including:
 - Detailed justification (i.e. line item budget);
 - Labor, other direct costs, indirect costs, and level of effort for each employee proposed for this project.
- d) Short CVs/bio sketches of all proposed consultants;
- e) Summary of the work to be performed by each employee proposed for this project;
- f) Company/ organization Data Universal Numbering System (DUNS) number and confirmation of current status in the System of Award Management (SAM);
- g) Completed USAID Contractor Employee Biographical Data Sheet forms for each employee proposed for this project (<https://www.usaid.gov/forms/aid-1420-17>).

VII. EVALUATION CRITERIA AND CONTRACT MANAGEMENT/OVERSIGHT

Selection of an offer for contract award will be based on an evaluation of proposals against technical merit and budget justification. Proposals shall first be evaluated from a technical standpoint based on the consulting proposal, including prior relevant experience, without regard to proposed budget justification. For those proposals determined to be technically acceptable, budget justification will be evaluated.

Bidders are required to have a Data Universal Numbering System (DUNS) number and maintain a current registration in the System of Award Management (SAM).

A subcontract agreement between USEA and the Consultant shall be subject to all USAID Special Terms and Conditions, including all mandatory FAR Flow-Down clauses, where applicable, and the provisions included in 2CFR200 and 2CFR700. All bidders are strongly encouraged to review these provisions prior to submitting a proposal.

- Standard Provisions for U.S. Nongovernmental Organizations: <https://www.usaid.gov/sites/default/files/documents/1868/303maa.pdf>
- 2CFR200: <https://www.gpo.gov/fdsys/pkg/CFR-2014-title2-vol1/pdf/CFR-2014-title2-vol1-part200.pdf>
- 2CFR700: <https://www.gpo.gov/fdsys/pkg/CFR-2015-title2-vol1/pdf/CFR-2015-title2-vol1-part700.pdf>

Subcontract agreement management, oversight and payment will be carried out by USEA.

VIII. QUESTIONS AND CLARIFICATIONS

For all questions and clarification requests please contact Ms. Caity Smith, Senior Program Coordinator, at csmith@usea.org.

END OF RFP