



**United States Energy Association
Power Africa: A U.S. Government-Led Partnership to Increase Sub-Saharan Africa's Access to Energy
Request for Proposal – Drilling Training: Cementing for Geothermal Applications and Geothermal
Fishing Operations**

**REQUEST FOR PROPOSAL – Drilling Training: Cementing for Geothermal Applications and Geothermal
Fishing Operations**

Question due date: Wednesday, July 25, 2018

Closing date of RFP: Friday, August 3, 2018

Implementing Organization: United States Energy Association

Funding Agency: United States Agency for International Development

The United States Energy Association (USEA) is inviting prospective organizations or individuals through this Request for Proposal (RFP) to submit proposals for two trainings for geothermal drilling operations; one on principles of cementing and one on fishing operations. This is an activity implemented by USEA, funded by the United States Agency for International Development (USAID) as part of the Power Africa Initiative.

Questions regarding this RFP are due by 17:00 hours EDT on Wednesday, July 25, 2018. Please send all questions via email to Ms. Caity Smith, Senior Program Coordinator, at csmith@usea.org. Responses to all questions will be sent to all parties and posted on the USEA website no later than Friday, July 27, 2018.

Proposals are due by 17:00 hours EDT 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 Resources Council (GRC), 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 800MW of geothermal energy generation to Kenya by 2023. While preparing for this rapid increase in production, there is a need to train KenGen staff on safe and efficient drilling practices.

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 two trainings for KenGen staff in cementing for geothermal applications and fishing operations. Each class will be aimed at a different group of up to ten (10) students.

Cementing for Geothermal Applications

This training is anticipated to last 7-10 business days. Upon completion of this training program, participants should be able to:

- Explain why and when cementing is used and the different types of cement and cement additives
- Describe the order and purpose of each casing string, the different types of cement jobs and the difference between casing and liner jobs

- Explain the basic chemistry of cement and additives, their function and basic testing equipment and methodology
- Explain the factors that affect the success of cementing operations
- Discuss the use and function of casing equipment (centralizers, plugs, float collars, shoes, etc.) that support cementing operations.
- Explain the key data for cement job design importance of different operational factors on the design of cement jobs
- Explain the design criteria for proper cement slurry properties and the relationship to operational applications
- Understand the causes, impact of lost circulation as well as the corrective measures applied
- Identify the types scenarios for remedial cementing applications
- Understand the challenges and solutions for geothermal cementing applications
- Evaluate cementing operations and logistics and enable the reduction of HSE and operational risk

Geothermal Fishing Operations

This training is anticipated to last 5 business days. Upon completion of this training program, participants should be able to:

- Outline the risks and conditions for open hole and cased hole environments during fishing operations.
- Identify the purpose of conventional fishing equipment and services.
- Classify the types of fishing services and associated tools.
- Outline the differences between pilot and section milling and the applications for each

IV. SCHEDULE

It is anticipated that both training programs will be completed prior to December 31, 2018. Please include a schedule and proposed training dates with your proposal

V. DELIVERABLES

The following deliverables are anticipated:

- Conduct two training programs for KenGen;
 - Cementing for Geothermal Applications
 - Geothermal Fishing Operations
- Final training materials to be delivered electronically a minimum of one week prior to the start of each training program;
- Certificates of completion for each trainee.

USEA will be responsible for all logistical arrangements, including:

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

VI. PROPOSAL CONTENT

The proposal must contain the following:

- a) A cover letter to the proposal;
- b) A technical proposal, not to exceed fifteen (15) pages, including:
 - Proposed work plan and methodology;
 - Description of past trainings for geothermal drilling operations;
 - A timeline for this consultancy, including proposed training dates and locations.
- c) A financial proposal, including:
 - Detailed justification (i.e. line item budget);
 - Per participant cost for training course
- d) Short CVs/bio sketches of all proposed trainers;
- e) Company/organization Data Universal Numbering System (DUNS) number and confirmation of current status in the System of Award Management (SAM);
- f) If proposing training at a site other than the KenGen offices in Olkaria, please include any information about the proposed training facilities, as well as any agreements that your company/organization has with surrounding lodging or transportation services.

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.

While classroom only training is acceptable for proposals, additional weight will be given to proposals that include hands-on training for one or both topics, either at a training site outside of Kenya, or while using KenGen's equipment.

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 no later than Wednesday, July 25, 2018. Answers to all questions will be sent to interested parties and posted online by Friday, July 27, 2018.

END OF RFP