

REQUEST FOR PROPOSALS:

ASSESSMENT OF THE GSE and EEP GEOTHERMAL DATA MANAGEMENT PROGRAM IN ETHIOPIA

OPPORTUNITY OPEN DATES:

March 31, 2017 – April 21, 2017

BACKGROUND:

The U.S.-East Africa Geothermal Partnership (EAGP) is a public-private partnership between the U.S. Agency for International Development (USAID) and the US 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.

EAGP is part of the Power Africa Initiative. One of the goals of the Initiative is doubling access to power in sub-Saharan Africa in five years. 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 prefeasibility 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 electricity generation capacity and access. 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.

The Government of Ethiopia (GoE) is aggressively working to develop their nation's 7,000 MW geothermal resources. GoE has set a target generating capacity of 2,500 MW from geothermal resources by 2030. In order to support the GoE's objectives, the United States Government (USG), through the Power Africa Initiative, has been collaborating with the private sector and other development finance institutions (DFIs) to accelerate the development of Ethiopia's geothermal resources.

In 2016 the GoE passed into legislation the Geothermal Resources Development Proclamation (GRDP). The new law set forth regulation regarding the country's geothermal resources. The proclamation called for the creation of a new geothermal entity, one that brought together the geothermal directorate of the Geological Survey of Ethiopia (GSE) and the geothermal projects team of Ethiopia Electric Power (EEP). The new geothermal entity will report directly to the Ministry of Water, Irrigation and Electricity (MoWIE). With the creation of a new geothermal entity comes the creation of new internal policies and procedures regarding geothermal data management. It is therefore essential that intervention take place during the entity's early stages to properly align new internal data policies and procedures with international best practices in geothermal data management programming.

This consultancy, funded by the U.S. – East Africa Geothermal Partnership, aims to improve GSE and EEP’s geothermal data management system. The consultant will 1) provide the geothermal entity of GSE and EEP with an introduction to Geothermal Data Management 2) assess the current Geothermal Data Management Systems and Procedures 3) develop a report outlining the completed assessment and corresponding recommendations 4) provide ongoing consultancy services to the GSE and EEP geothermal entity.

PROJECT TASKS AND DELIVERABLES

The Consultant will carry out the following:

Task 1: Preparation and Delivery of Introductory Presentation, “Introduction to Geothermal Data Management”

Prior to travel to Ethiopia, the Consultant(s) will review available documentation on GSE and EEP’s present data management program and prepare an introductory presentation to be given to the personnel of the geothermal entity of GSE and EEP’s at the outset of the consultancy.

Upon arrival in Addis Ababa, Ethiopia, the Consultant(s) will engage the geothermal entity staff of the GSE and EEP delivering the introductory presentation, including consultant introductions and key data management concepts, to be given on **Day 1** of the program. The presentation should not be more than 2.5 to 3 hours in length. During this initial visit, the Consultant(s) will spend approximately 5 working days in Addis for the in-country introductory meetings and data management systems assessment (as defined in Task 2). The presentation will include a brief introduction to each of the consultants, including his/her educational background, professional experience and/or his/her company’s capabilities. The presentation will foster a more effective partnership between the Consultant(s) and GSE and EEP employees participating in the assessment, by ensuring a shared understanding of common goals, experiences of pitfalls, and industry best practices.

The core focus of the presentation should be an overview of key concepts in data management to be explored and discussed throughout the week of assessment. The Consultant(s) shall cover the following topics, and shall be responsible for topics appropriate for his/her areas of expertise.

Possible Areas of Presentation Focus:

1. Database types (relational and object-oriented)
2. Role of the administrator
3. Best practices for an employee-database interface
4. Database Design (including: schemas, keys, attributes, relationships, rules of normalization)
5. Strategies for overall data storage and design

6. Sampling and sample theory, entering and storing geothermal sample data
7. Error checking and detection
8. Description and optimization of workflow practices
9. GIS as used for exploration, data sets, spatial modeling

Deliverables for Task 1:

Any draft-version digital files or physical handouts to be presented as part of the “Introduction to Geothermal Data Management” presentation should be submitted to USEA/EAGP no later than one week prior to the initial assessment. Final presentation materials should be submitted to USEA/EAGP no later than one week after the presentation.

Task 2: Complete In-Country Assessment of GSE and EEP Geothermal Data Management Systems and Procedures

The Consultant(s) will travel to Ethiopia to complete the in-country assessment after working with EAGP, EEP and GSE to determine available dates. The Consultant(s) will engage with GSE and EEP geothermal entity staff to understand the current state of geothermal data collection, analysis, processing, storing and sharing at GSE and EEP. In addition, the Consultant(s) shall conduct meetings with the GSE and EEP management-level employees to identify the goals GSE and EEP have for future geothermal data management systems. Specific actions in this task include:

1. Review of existing documents relating to current systems, hardware/software architecture and technology, data management practices, data architecture and associated process flows supported. One key document to be reviewed is the previously completed 2015 data management assessment of the GSE. Technical areas to be considered include data from geological mapping, geological well logging, geophysical measurements (MT, TEM, gravity, magnetics and seismic) and geochemical survey (fumaroles, hot-springs and soil gas sampling), drilling, well sampling and analysis, well logging and discharge testing activities.
2. Interview technical process staff members and managers to understand: 1) Current system operating parameters, areas of strong performance, decision making channels and technical and structural challenges, 2) Existing hardware and software systems and staff capabilities related to their use and 3) Future business plans/processes and objectives that systems must support. Identify strategic technology licensing or partnerships that may already be in place that can be leveraged; future technology plans, data processes and the associated system performance desired.
3. Evaluate existing GIS system (ArcGIS Desktop, server, and ArcSDE) with regard to managing and sharing existing data and related information. Evaluate MSSQL database use and performance with regard to the goals for storage, sharing and data retrieval for future analysis.

Deliverables for Task 2:

The Consultant(s) shall submit to USEA/EAGP copies of any geothermal data management reports, samples or other documents given to them by GSE and EEP personnel during the course of in-country interviews and assessment no later than 30 days after completion.

Task 3: Submit a Report Following Completion of the In-Country Assessment

Following completion of the technical assessment of GSE and EEP's data management systems and procedures, the Consultant(s) shall submit one report that summarizes major findings about the current situation and desired future state of data management. The report will be marked "Confidential" and will not be distributed by the Consultant(s) without the express permission of GSE and EEP and/or USEA/EAGP. The report will include the following sections:

1. Consultant's name, company affiliation, position within the company and contact email
2. Brief summary of interviews conducted at GSE and EEP, and of documents/systems reviewed during the assessment
3. Identification of GSE and EEP's goals or desired outcomes from their geothermal data management system
4. Professional assessment of the current state of GSE and EEP's data management in light of its goals and desired outcomes, i.e. How well is the system responding to GSE and EEP's data management needs, information sharing and decision-making processes?
 - a. Include technical "problem points" (historic major failures, repeated service interruptions, need for high levels of manual labor or service support from outside service providers) as well as business "pinch points" in processes that are imposed by systems (process work-around, extra business manual labor, data processing errors, etc)
5. Identify areas that would benefit from more detailed analysis before proceeding to recommendations for improvement or change; (e.g., process re-engineering opportunities that may impact a future system choice)
6. Recommendations for system improvements (technical and business structural)
7. Detailed implementation plan for adopting the recommended improvements to the system
8. Table of expected costs (rough estimates are acceptable) for suggested options for improvement, along with Consultant's rated value of the investment (cost v. benefit table)
9. List of potential follow-on commercial opportunities developed by the Consultant for his/her company or consulting business
10. Consultant recommendations for EAGP's improvement of this technical assistance assignment, should it be repeated in other East African countries

Deliverables for Task 3:

The Consultant shall turn in a draft version of the confidential report described above for review by USEA/EAGP no later than three weeks following the completion of the in-country assignment. After USEA has returned any comments or questions, the Consultant shall prepare a final draft of the

assessment report to be submitted to USEA/EAGP no later than one week following the receipt of USEA's edits.

METHODOLOGY

The consultant shall outline the full methodology in the proposal, but should make use of a combination of in-person assessment of existing technical documents and procedures, in-person interviews with technical process staff and other key stakeholders as well as remote/desk review and communication.

DESIRED COMPETENCIES, SKILLS AND EXPERIENCE

- A team that comprises experts with advanced degrees in Business Administration, Computer Systems, IT Management, Project Management, Geology, Geochemistry, Geoscience, Geophysics, or a related field
- Demonstrated experience working with public agencies, private sector stakeholders, and multilateral/regional institutions
- Minimum of eight (8) years of professional experience in geothermal project development, business management, strategic planning, organizational change management, data management or related fields
- Knowledge of East Africa's geothermal stakeholders, development history, and potential for growth
- Understanding of geothermal data management requirements
- Excellent communication, analytical and writing skills
- Ability to work independently and with a variety of organizations
- Ability to travel for this assignment internationally and to conduct remote desk reviews

EVALUATION CRITERIA AND CONTRACT MANAGEMENT/OVERSIGHT

Evaluation of proposals will be conducted by a stakeholder review team on a Quality and Cost-Based Selection (QCBS) basis with a Cost weight of 30% and Quality weight of 70%. Contract management, oversight and payment will be carried out by the United States Energy Association (USEA).

CONTRACT TYPE

This contract will be awarded as a fixed price contract.

PROPOSAL SUBMISSION

Proposals should be submitted by email in PDF form to Ms. Ashley Ndir at andir@usea.org. Proposals should be in PDF format and not exceed 4 separate PDF files.

DEADLINE FOR SUBMISSION

Proposals must be submitted no later than 5:00 PM PDT on April 21, 2017.

DOCUMENTS TO INCLUDE WHEN SUBMITTING A PROPOSAL

Applicants must submit the following:

- Letter of Interest explaining the qualifications of the Applicant
- Technical proposal outlining the proposed work plan and methodology. This proposal should include a narrative detailing the qualifications and roles of any team members, how each objective of the consultancy will be met, an estimated timeline for the delivery of services, proposed deliverables, any necessary international travel and the location of work carried out.
- CV(s) including past experience in similar projects and demonstrating a minimum of eight (8) years of professional experience in a relevant field.
- Financial proposal detailing anticipated cost of services to complete the consultancy aligned with the work plan in the proposal, including, but not limited to:
 - Labor, fringe and overhead
 - Equipment, supplies and communications
 - Local and international travel expenses, compliant with all USAID travel regulations and the Fly America Act.

QUESTIONS AND CLARIFICATIONS

For any questions or clarifications about this consultancy, please contact Ms. Ashley Ndir at andir@usea.org. Please submit questions prior to 5:00pm April 14, 2017. All questions and answers shall be made public on the USEA website on April 17th so that all interested parties are fully informed.