



**United States Energy Association  
Power Africa: A U.S. Government-Led Partnership to Increase Sub-Saharan Africa’s Access to Energy  
Request for Proposal – Ethiopia Substation Operation & Maintenance Training**

*Please note that in order to provide bidders with an opportunity to develop the most efficient training program this RFP has been amended to extend the closing date. The new closing date is Friday, June 30<sup>th</sup>, 2017. The training course has been tentatively rescheduled for September 2017. Please also see USEA responses to questions submitted by potential bidders in Section X at the bottom of the document.*

**UPDATED REQUEST FOR PROPOSAL – Ethiopia Substation Operation & Maintenance Training**

**Closing date of RFP:** Friday, June 30, 2017  
**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 conducting the training on “Substation Operation & Maintenance” for the Ethiopian Electric Utility (EEU) in Addis Ababa, Ethiopia. This is an activity implemented by USEA under the United States Agency for International Development (USAID) 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. Marina N. Barnett, Senior Program Coordinator, at [mbarnett@usea.org](mailto:mbarnett@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.

## **II. SCOPE OF WORK**

USEA plans to arrange a single five (5) day training course for distribution utility participants on maintaining a distribution substation. Approximately 50 EEU personnel will participate in the training course that will take place in Addis Ababa, Ethiopia.

The training will focus on the maintenance and testing requirements for common substation devices, including, but not limited to power transformers, current transformers (CT) and potential transformers (PT), oil, air and vacuum circuit breakers, switchgear, ground grid systems, batteries, chargers, insulating liquids, arrestors, capacitors, regulators, and protection systems. At the end of the course, the participants should be able to demonstrate understanding and working knowledge of common substation devices, established safety procedures, and best practices in operating and maintaining the equipment.

As there is minimum to no testing equipment available at the training site in Addis Ababa, potential trainers are strongly encouraged to bring testing equipment that provides thermal readings if possible.

The training course will include pre-training and post-training surveys administered to all participants. A pre-training survey will be designed to assess participants' baseline knowledge and competencies and to identify knowledge gaps and weak areas, so that the course can be modified as necessary. A post-training/skill assessment survey will be designed to measure participating trainees' progress. A program evaluation instrument will also be developed to measure the overall effectiveness of the program, as well as to identify areas for improvements for future capacity building programs.

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 training course.

## **III. BACKGROUND**

Substations are major capital assets of distribution utilities and serve crucial roles in ensuring quality, reliable and stable power supply to customers. Failures in any parts of a substation facility may result in major issues affecting customer service, regulatory penalties, loss in utility revenue and customer goodwill. Hence, having safe and proper operation and maintenance protocols is essential for the continued quality and reliable operation of these assets. This requires a thorough understanding of the working principles, applications, safety, technology support, standards and best practices to ensure a reliable, consistent and long term performance of substation facilities. Having skilled substation maintenance technicians is essential to system reliability.

In March 2017, EEU personnel attended a USAID/Power Africa funded training course on basic knowledge and skills needed to perform electrical operations and maintenance on a medium voltage distribution substation, established safety procedures, and best utility practices on equipment maintenance. While this training was considered very useful for the EEU personnel, they require a more advanced and hands-on training on substation equipment performance, testing, and maintenance.

## **IV. IMPLEMENTATION AND APPROACH**

The applicant will conduct a five (5) day training course tailored to the EEU's needs, as described in Section II.

USEA will be responsible for arranging and paying for all logistical arrangements for up to 5 training personnel, including:

- Economy-class roundtrip airfare;
- Per diem (meals and lodging) for up to 7 days in Addis Ababa, Ethiopia (Note: Lodging to be provided at a 4 or 5 star hotel) according to US government regulations;
- Daily ground transportation in Addis Ababa between the hotel and training sites;
- Reimbursement for visa fees;
- Ground transportation to/from the airport;
- Vaccinations (if needed); and
- International health insurance.

## **V. SCHEDULE**

The training course is tentatively scheduled for September 2017.

## **VI. DELIVERABLES**

The following deliverables are anticipated:

- Substation Operation & Maintenance Training outline with contents specified in Section II;
- Pre-training and post-training surveys, and an overall program evaluation instrument;
- Final training curriculum, including manuals and all other training materials distributed to the participants;
- Conducting the 5-day training; and
- Final report to include the following:
  - Summary of major outcomes of the training program;
  - Challenges encountered and knowledge/skills acquired by participants;
  - Summaries of the administered pre-training and post-training surveys, and an overall program evaluation instrument;
  - Recommendations for additional training and technical assistance as appropriate.

## **VII. PROPOSAL CONTENT**

The proposal must contain the following:

- a) A cover letter to the proposal;
- b) A technical proposal outlining the proposed work plan and methodology;
- 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 proposed trainers;
- e) Summary of the work to be performed by each employee proposed for this project;
- f) Completed USAID Contractor Employee Biographical Data Sheet forms for each employee proposed for this project (<https://www.usaid.gov/forms/aid-1420-17>).

## **VIII. 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 training proposal without regard to proposed budget justification. For those proposals determined to be technically acceptable, budget justification will be evaluated.

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

## **IX. QUESTIONS AND CLARIFICATIONS**

For all questions and clarification requests please contact Ms. Marina N. Barnett, Senior Program Coordinator, at [mbarnett@usea.org](mailto:mbarnett@usea.org).

## X. RESPONSES TO SUBMITTED QUESTIONS

### **Question 1: Overall logistics and financial arrangements**

USEA will organize and pay for all logistical arrangements, including trainers' international travel and local accommodations, local training venue, catering, transportation, etc.

The proposal needs to include ONLY the costs of designing the training course (including surveys and evaluations) and training personnel's time.

### **Question 2: Utility personnel to be trained (level of education & experience, etc.)**

This will be a mixed group of engineers and technicians, with various degrees of education. Earlier this year these personnel participated in a USAID/Power Africa funded training course on established safety procedures and basic knowledge and skills needed to perform electrical operations and maintenance on a medium voltage distribution substation. Please note: the proposal should be for basic maintenance of substation equipment – what tests should be performed, how often, what equipment should be used etc. While USEA will make every effort to determine the exact equipment EEU uses, we are looking for a generic course on basic maintenance. EEU does not currently have a training program for its technicians on maintenance.

### **Question 2: Training site (classrooms, field training, etc.)**

Some of the training program (all theoretical sessions) will be conducted in conference rooms of a chosen hotel in Addis Ababa. USEA will provide 3 or more separate classrooms if necessary.

USEA will try to schedule as much "hands-on" training at an EEP/EEU training facility as possible. However, USEA cannot guarantee how much time the group will be allowed to spend at that facility at this time.

**For pictures of the EEP/EEU training facility and available training and testing equipment please follow this link: [https://www.mediafire.com/folder/5wme35m9j6sbe/EEU\\_Training\\_Facility\\_Photos](https://www.mediafire.com/folder/5wme35m9j6sbe/EEU_Training_Facility_Photos).**

### **Question 3: Local facilities (availability of computers, projectors, catering, etc.)**

USEA will provide reasonable accommodations (classroom furniture, etc.), as well as projectors and audio/visual equipment.

Trainees will not have access to computers, so hard copies of training materials are advisable.

USEA will provide catering (coffee breaks, lunches, dinners when necessary) for the full duration of the training course.

### **Question 4: Hands-on training (availability of testing equipment, tools, PPE, etc.)**

The EEP/EEU training facility has very limited availability of testing equipment. Please follow this link, [https://www.mediafire.com/folder/5wme35m9j6sbe/EEU\\_Training\\_Facility\\_Photos](https://www.mediafire.com/folder/5wme35m9j6sbe/EEU_Training_Facility_Photos), for some pictures of what is available.

Bidders are encouraged, but not required to bring testing equipment if possible. Please include all relevant costs in the financial proposal. ***Please also include what equipment will be necessary for the training to proceed as proposed so we can ensure it is available.***

END OF RFP