



**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 “Train-the-Trainers” Series**

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**REQUEST FOR PROPOSAL – Ethiopia Substation Operation & Maintenance “Train-the-Trainers” Series**

**Closing date of RFP:** February 9, 2018

**Implementing Agency:** 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 “Train-the-Trainers” Series 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.

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**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 safe, reliable, affordable and 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

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 series.

USEA plans to arrange a series of four (4) trainings for distribution utility participants on operating and maintaining a distribution substation. The trainings will have durations of five (5) days with two (2) half-day site visits, and will be held in Addis Ababa, Ethiopia.

The training series will focus on specific electric safety and maintenance issues, as well as practical techniques to share the acquired knowledge with others. A draft schedule of the training series is as follows:

Training 1: Safety and Grounding/Earthing – May/June 2018

Training 2: Safety and Isolating Equipment (Circuit Breakers) – July/August 2018

Training 3: Safety and Transformer Maintenance – October/November 2018

Training 4: Safety and Switching – Spring of 2019

At the end of the series, the participants should be able to:

- 1) demonstrate advanced understanding and working knowledge of common substation devices, established safety procedures, and best practices in operating and maintaining the equipment 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; and
- 2) demonstrate an ability to convey this knowledge and skills to others.

Approximately 15-25 EEU technicians and engineers with advanced skills and previous training experience will participate in each training.

Each training in the series 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 of improvement for future capacity building programs.

As there is limited testing equipment available at the training site in Addis Ababa, potential trainers will need to bring their own testing equipment. A sample list of the testing equipment may include (but not limited to) a battery meter, true RMS multimeter, true RMS clamp meter, phase sequence indicator, insulation tester, digital earth tester, visual IR thermo meter, digital RCD/GFCI/ELCB tester, hydrometer, extension board. USEA will assist with customs clearance and other transportation requirements for the testing equipment to be allowed into Ethiopia.

## III. BACKGROUND

**Ethiopian Electric Utility Overview:** The Ethiopian Electric Utility (EEU) as a public utility enterprise was established for indefinite duration by regulation No. 18/1997 and conferred with the powers and duties of the previous Ethiopian Electric Utility. The purpose of the corporation is to engage in the business of distributing and selling electrical energy in accordance with economic and social development policies and priorities of the government and to carry out any other related activities that would enable it achieve its purpose.

**EEU Vision:** "Energizing Ethiopia's sustainable growth and enabling it to be the power hub of Africa."

**EEU Mission:** "To be a world-class utility and contribute towards nation building by ensuring delivery of cost-effective, safe, reliable and high quality power and to enable interconnections across the African Continent for exporting surplus power. EEU shall strive towards achieving international standards of customer care through sustained capacity building, operational and financial excellence, state-of-the-art technologies while ensuring highest standards of corporate governance and Ethics."

One of the most urgent challenges facing EEU that the current activity aims to address is an insufficient level of professional skills, knowledge and experience among technicians and engineers operating EEU substations across the country, which leads to substantial economic and sometimes human losses. According to previous assessments, practical hands-on training is particularly needed in the following areas: basics of protection and testing, safety practices, earthing, maintenance of transformers, circuit breakers and other equipment.

In 2017, USEA facilitated three USAID/Power Africa funded training courses on basic and advanced 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 for some of the EEU substation personnel. While these trainings were considered extremely useful, they only scratched the surface and showed that it would not be cost-effective to attempt to train all of the EEU substation personnel. A different model – helping EEU build its capacity by preparing their own “in house” trainers – is necessary to maximize the effect and ensure sustainability of the project.

#### **IV. IMPLEMENTATION AND APPROACH**

The applicant will conduct a series of four (4) trainings tailored to the EEU’s needs, as described in Section II.

USEA will be responsible for all logistical arrangements for up to 3 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 U.S. government regulations;
- Assistance with obtaining business visas and reimbursement of visa fees;
- Vaccinations (if needed);
- International health insurance;
- Assistance with obtaining customs clearance and reimbursement of customs and transportation fees for the testing equipment;
- Ground transportation to/from the airport;
- Daily ground transportation in Addis Ababa between the hotel and training sites;
- All travel related logistics and costs for the Ethiopian participants (if necessary);
- Training venues and meals.

#### **V. SCHEDULE**

The training series is tentatively scheduled to commence in May/June 2018 and end in late spring/early summer of 2019.

#### **VI. DELIVERABLES**

The following deliverables are anticipated for each training:

- 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 a 5-day training program in Addis Ababa; 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 bidder's Data Universal Numbering System (D-U-N-S) number and proof of a current registration in the System of Award Management (SAM);
- c) A technical proposal outlining the proposed work plan and methodology;
- d) 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;
- e) Short CVs/bio sketches of proposed trainers;
- f) Summary of the work to be performed by each employee proposed for this project;
- g) 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**

All bidders are required to provide a DUNS number and maintain a current SAM registration. Proposals without a DUNS number or proof of SAM registration will not be considered.

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.

Evaluation Criteria:	10%:	Experience with similar projects (for each trainer, and the company in general)
	25%:	Subject matter expertise
	30%:	Technical Approach
	35%:	Cost

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). All questions and answers will be provided to all prospective bidders.

END OF RFP