QUESTIONS AND RESPONSES FOR RFP ON ETHIOPIAN SUBSTATION OPERATION & MAINTENANCE "TRAIN-THE-TRAINERS" SERIES: UPDATED

QUESTION: *Please confirm that we do not need to include the costs identifies in Section IV of the RFP.*

ANSWER: We are confirming that proposals do **NOT** have to include the costs identified in Section IV of the RFP. USEA will purchase airfare, book and pay for hotel accommodations, arrange airport transfers in Addis Ababa, arrange all meals, and purchase international health insurance for the trainers. We will also reimburse costs of relevant vaccinations, visa fees, airport transfers in the city of origin (if supported by receipts), and any costs related to custom clearance and transportation of the testing equipment.

QUESTION: *Section III of the RFP states that hands on training is particularly needed in the following areas: basics of protection and testing. "Basics of Protection and Testing" is not mentioned as one of the Training Series. Please elaborate on whether the technical approach of our RFP should include training in protective relay schemes and how to test different types of relays?*

ANSWER: By protection we mean general safety practices that are to be covered in each session. Testing applies to various equipment (depending on the session) and to be covered in each session.

QUESTION: *Please elaborate on what exactly the EEU technicians and engineers are looking for in the 1st training session- Safety and Grounding/Earthing. Are they looking for information of how to properly ground equipment inside a distribution substation, or are they looking for information on how to design an effective ground grid system inside a distribution substation?*

ANSWER: We are looking for safety procedures and best practices in grounding at a distribution substation. We are **NOT** considering ground grid system design.

QUESTION: *With respect to Training 2, are EEU technicians looking for information on SF6 circuit breakers, oil circuit breakers or vacuum circuit breakers? Are they looking for information on how different types of breakers operate or just the safety and maintenance issues associated with circuit breakers?*

ANSWER: All of the above.

QUESTION: *Section VI states that we should include manuals as part of our deliverables. How many manuals are we to furnish?*

ANSWER: We would like to have up to 30 hard copies (depending on the number of trainees) for each session, as well as electronic copies.

QUESTION: *Can you provide more guidance on the projected trainees' background and skills level? Have they participated in the previous training sessions, facilitated by USEA?*

ANSWER: EEU indicated that they will select a small group of their engineers and technicians with the most advanced professional skills (and advanced English language capabilities), and we assume that most of them – if not all – have gone through previous trainings sessions.

***QUESTION**: Could you provide more guidance on the content of the Module 4: Switching?*

ANSWER: Please find below a sample agenda for Module 4.

A. Switching of the equipment or line for safe working:

- *Outage planning*
- *Outage execution e.g. open, isolation from supply, placing safety grounds. (Lock Out Tag Out)*
- *Handing over the equipment or line and Issue of Permit to Work (PTW) for safe working*
- *Safety while working on equipment or line by more than one team*
- *Safety – testing of equipment / line after isolation from supply by working team*
- *Returning the equipment or line to service after the outage*

B. Knowledge of interlocks for safe switching operation of equipment or line:

- *The equipment includes*
- *Transformer*
- *Circuit breaker*
- *Line or Feeder*
- *Bus Bar*
- *Battery System*
- *DC Supply System*
- *Station Auxiliary Supply System*
- *Capacitor Bank, Regulator, Lightning Arrester*

C. Protection Relay setting, relay targets and its interpretation

D. Black start operation (OPTIONAL)