### **UPDATED:** Questions and Responses

# RFP – REVIEWS: BLACK START PLAN, RELAY PROTECTION COORDINATION, INTEGRATION OF POWER SYSTEM STABILIZERS - RWANDA

QUESTION: On what target year should this analysis be carried out? Only the current year?

**ANSWER:** The studies should go through 2025.

QUESTION: Can you confirm what power system model will be provided? Static and/or dynamic for all relevant scenarios? In what software?

**ANSWER:** Yes, power system models – both steady state and dynamic – will be provided to the winning bidder. REG uses PSS/E for system modeling.

#### **QUESTION:** How much is per diem?

**ANSWER:** Per diem amounts depend on total days of travel and are calculated in accordance with foreign per diem rates published by the U.S. Department of State.

## QUESTION: For the Black Start Plan – are SAT/FAT tests available on the machines?

**ANSWER:** We assume that these tests were done when the generators were installed and that records were kept. We will have to confirm with the utility.

QUESTION: For Protection Coordination – How far should the protection of the distribution network be studied (a limit may be the lines and/or cable feeders of the substations where HV/MV and MV/MV transformers are installed)?

**ANSWER:** The study should include all devices that protect substation backbone feeders.

QUESTION: For Protection Coordination – Can you provide a general single line diagram of the electrical network representing all the equipment namely (or give an indication of the size of the system)?

**ANSWER:** No. This will be provided to the winning bidder.

QUESTION: For Protection Coordination – Can you provide single line diagrams of the different substations if not represented on the general single line diagram? ANSWER: No. This will be provided to the winning bidder.

QUESTION: For Protection Coordination – Is the review of the power plant protection system included in the study?

ANSWER: No.

QUESTION: For Integration of PSSs – Can you confirm that only local models are subject of this study? If interarea oscillations should be considered, can you confirm that a validated model of the interconnected system (Burundi, DRC and by extension EAPP) will be provided?

ANSWER: Yes.

# QUESTION: For Integration of PSSs – How many machines are equipped with PSS? Of which type? Are the block diagrams available?

**ANSWER:** This information will be obtained during the technical review meetings in the country at the beginning of the project.

# QUESTION: For Integration of PSSs – Which FAT/SAT test reports are available (for excitation systems/PSS/etc.)?

**ANSWER:** We assume that these tests were done when the generators were installed and that records were kept. We will have to confirm with the utility.

QUESTION: For Integration of PSSs – Are recordings of local or interzonal oscillations available? If yes please provide for informative purpose and to understand how these can be used for validation.

**ANSWER:** These recordings will be provided to the winning bidder.

**QUESTION:** For Integration of **PSSs** – Is a measuring campaign required in order to validate the outcomes of the study?

ANSWER: No.

# QUESTION: We are not sure our DUNS number is valid. Could you please check in your system?

**ANSWER:** Unfortunately, I have no way of checking whether a DUNS number is valid or not. A company should be able to check their DUNS number through the Dun&Bradstreet website, https://fedgov.dnb.com/webform/pages/CCRSearch.jsp.

# QUESTION: We have applied for SAM registration but don't have it yet. Can we still submit a proposal?

**ANSWER:** Yes. USEA will accept a proposal **if it includes proof** that the company is **in the process of obtaining** a DUNS number and SAM registration. A PDF copy of an email from "notification@sam.gov" to the bidder stating that the bidder "successfully submitted the entity registration for NAME OF COMPANY in the U.S. Government's System for Award Management (SAM)" will be considered an acceptable proof.

Please keep in mind that the winning bidder **must** have both before the contract is signed.

QUESTION: Will the existing network and future network (considering completion of the critical 220 kV infrastructure in the next 2-3 years) be sufficient for the Black Start Plan and PSSs review? Or should longer term cases be considered as well?

**ANSWER:** USEA has recently facilitated load flow modeling and security analyses for the Rwandan network and there is PSS/E data available through 2025, so the studies should go through 2025.

QUESTION: Are the PSS review only for the generation application or will this be for the PSSs in the network as well?

**ANSWER:** The PSSs review should include generation and network applications.

QUESTION: Are there existing simulation models that capture the existing and future networks? And what software is it in (PSSE, ETap, DIGSilent, etc)

**ANSWER:** Yes. USEA has recently facilitated a comprehensive project on developing and validating steady state and dynamic models, both for the existing network topology, as well as planning models for 2020 and 2025. REG uses PSS/E for modeling its network.

QUESTION: If the network models exist, can we assume that high level verification of these models will be sufficient, or will we be required to do detailed verification for each network configuration?

**ANSWER:** These models have been developed and verified by experienced outside consultants. The data was brought up to date and verified.

QUESTION: Are the network models populated with dynamic data, such as generator control systems, dynamic load data, existing PSSs with their settings? ANSWER: Yes.

QUESTION: Are the network models validated against actual measurement data, and can they assumed to be an accurate representation?

**ANSWER:** Yes.

QUESTION: We assume that all protection settings will be supplied, and we will not be required to gather protection settings onsite. Is this assumption correct?

**ANSWER:** Relay settings will be provided but we cannot affirm that the field settings actually reflect the record settings. These issues can be clarified/confirmed during the technical review meetings in the country at the beginning of the project.

QUESTION: Down to what voltage level should the co-ordination be assessed?

**ANSWER:** We believe that the co-ordination should be assessed at the highest distribution voltage. However, this will be clarified/confirmed during the technical review meetings in the country at the beginning of the project.

QUESTION: We assume that a functional assessment of the existing settings will be sufficient and that revised settings are not required. Is assumption correct?

**ANSWER:** No. The RFP requests work to "identify deficiencies and potential problems and provide technical solutions and recommendations for improvement" which includes revised settings.

QUESTION: We believe that it would take longer than the time allotted in the tentative schedule included in the RFP to conduct a proper protection coordination study. Can we propose a different schedule?

**ANSWER:** Yes. A different schedule will not result in any points deducted from your score as long as your proposal includes a reasonable and persuasive explanation for the deviation.

QUESTION: Can you please confirm that proposals should be submitted in a PDF form via email?

**ANSWER:** Yes. As the RFP states, proposals must be submitted "to Ms. Marina N. Barnett, Senior Program Coordinator, at <a href="mailto:mbarnett@usea.org">mbarnett@usea.org</a>. Proposals must be in digital format (PDF)."