

RE-ADVERTISEMENT: REQUEST FOR EXPRESSIONS OF INTEREST

ASSIGNMENT TITLE: RECRUITMENT OF AN INDIVIDUAL CONSULTANT/ AUTOMATION AND CONTROL EXPERT TO CONDUCT TESTS IN POWER PLANTS

REFERENCE NO: 11.07.022/IND/25/REOI/19-20/PROC-DGEN-EUCL/MD/AZM/ak

1. Background

Ntaruka, Mukungwa and Nyabarongo hydro power Plants are owned and operated by Energy Utility Corporation Limited (EUCL). Those plants have installed capacity of 11.25MW, 12MW and 28MW respectively.

On 10th February 2019, a blackout occurred and while restoring the system, an unexpected behavior happened on power stations with black start capabilities.

During the incident, units were started up and island formed around some of generating stations by connecting essential loads through 30 KV lines but at the time of connecting 110 kV electric line machine tripped with different alarms “loss of excitation, over speed, etc.”

For other power stations, machine was started but tripped immediately at first attempts of connecting load (before forming island).

These such behavior were attributed either to:

- Excessive reactive power from the grid
- Improper setting of governor and excitation
- Malfunction of governor, control and excitation system resulting in hunting, poor excitation etc.

Therefore, the proposed consultant will conduct the tests in the power plants, realize the training of REG EUCL engineering staff and then make recommendations on how to set the speed governors, AVRs and PSS correctly or upgrade them in case one that are installed could not meet requirements.

2. Objective of the assignment

The objective of the assignment is to investigate the reasons why the National Electrical Network collapsed in 10th February 2019, conducting specialized tests on speed governors and voltage regulators in the hydraulic power plants that failed to maintain stability as part of the grid become islanded, and realizing in collaboration with REG EUCL engineers, the necessary power system studies to ensure the power system stability.

3. Qualification of Consultant

- At least a master’s degree in electrical, mechanical or electromechanical engineering, a higher level is an added advantage

Experience

The minimum professional and technical standards required are:

- Minimum 20 years of work experience in area of power system stability.
- Demonstrated experience in conducting tests for AVR and Power System Stabilizer
- Ability to analyze the tests results, identify necessary settings modifications and provide the recommendations.
- High level of attention to detail
- An excellent command of the English language-both written and oral
- Ability to produce quality work within a deadline and under pressure
- Highly developed reporting skills

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- Motivated and can work in a team environment
 - Willing to share knowledge with client technical team

After the short listing, the selection will be based on the detailed Terms of Reference (TOR) for this assignment with specific objectives, scope of the assignments, Key deliverables, Timing, Competence and Qualifications and other requirements. These are available at www.eucl.reg.rw and DG market website: www.market.gov.rw. The selection of best candidate or best individual consultant will done in accordance with REG procurement manual as updated to date.

4. Duration of the assignment

The duration of the assignment is 5 months working together with EUCL team for hands on training and knowledge transfer.

5. Application and Submission

Interested and suitably qualified candidates should submit their Expression of Interest including CVs and a motivation letter highlighting how they meet the requirements detailed in the TOR. All applications should be submitted to the Central Secretariat of the Head of Procurement Management of EUCL and should be addressed to:

**The Managing Director
Energy Utility Corporation Limited (EUCL),
KN82 ST 3, NYARUGENGE District, Kigali City,
P.O Box 5634 Kigali, Rwanda**

Electronic applications will also be accepted and may be sent through: akarangwa@eucl.reg.rw copy to procurement-eucl@eucl.reg.rw

The outer cover for envelopes shall be clearly marked:

**REQUEST FOR EXPRESSION OF INTEREST (EOI)
INDIVIDUAL CONSULTANT/ RECRUITMENT OF AN INDIVIDUAL CONSULTANT/
AUTOMATION AND CONTROL EXPERT TO CONDUCT TESTS IN POWER PLANTS**

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The deadline for submission of expression of interest will be **22/01/2020**, at **17:00** hours Kigali time. Further information can be obtained via email to the email addresses mentioned above during office hours from 07H00 hours to 17H00 on all working days.

Done at Kigali, on **06/01/2020**.

**Eric BUGINGO
Head Procurement Management**

**Armand ZINGIRO
Ag. Managing Director**