

**TERMS OF REFERENCE FOR POWER MARKET EXPERT FOR THE EAPP - PROJECT
IMPLEMENTATION UNIT (PIU) (CONSULTANT)**

TECHNICAL SUPPORT TO THE EASTERN AFRICA POWER POOL

Position: Power Market Expert for the EAPP - PIU
Ref. No: ET-EAPP-85424-CS-INDV
Organization: Eastern Africa Power Pool (EAPP)

A. PROJECT BACKGROUND AND OBJECTIVES

The Eastern Africa Power Pool is an inter-governmental organization established in 2005 to coordinate cross-border power trade and grid interconnection among nations of the Eastern Africa region.

The pool comprises eleven member countries namely: **Burundi, Djibouti, Democratic Republic of Congo (DRC), Rwanda, Egypt, Ethiopia, Kenya, Sudan, Tanzania, Uganda, and Libya.** EAPP's General Secretariat is based in **Addis Ababa, Ethiopia** with a mandate to coordinate the development and functioning of the power pool.

The Council of Ministers (COM) is the supreme governing body of EAPP that provides policy, strategic guidance, and oversight. The Steering Committee (SC), which consists of Chief Executive Officers (CEOs) of the member utilities, is the executive arm responsible for policy execution and providing power pool strategic direction. The day-to-day activities are handled by a General Secretariat (GS) located in Addis Ababa, Ethiopia. EAPP also has four technical committees, comprised of member utility officials: the Planning Committee (PC), the Operations Committee (OC), the Environmental Committee (EC), and the Governance and HR Committee.

The Independent Regulatory Board (IRB) is EAPP's organ for regional regulation and reports directly to the COM. The IRB is composed of the heads of the national regulatory authorities / commissions in each member country.

EAPP's mission is to expand the regional infrastructure and integrate national power markets into a unified regional market where countries can trade and optimize energy resources to benefit the region with reliable, affordable, and clean power.

The objectives of the EAPP are to:

- i. Secure power supply for the member countries in the region;
- ii. Optimize usage of energy resources available in the region by promoting regional investment in power generation, transmission and distribution considering the environmental effects;
- iii. Increase power supply in the region to increase the access rate of the population to electricity in Eastern Africa;
- iv. Reduce electricity production cost in the region by using power system interconnection and increased power exchange between countries;
- v. Provide efficient coordination between various initiatives taken in the field of power production and transmission, as well as exchange in the region;



- vi. Create, in the framework of New Economic Partnership for African Development (NEPAD), a conducive environment for investment to facilitate the financing of regional integration projects in power generation and transmission; and
- vii. Facilitate, in the long term, the development of the electricity market in the region

Current regional context

Electricity demand in the region has doubled over the previous ten years and is expected to grow at 9% per annum over the next decade.

The ongoing regional interconnection projects consist of a series of projects to interconnect EAPP member grids and an inter power pool connection between the Southern African Power Pool (SAPP) and the EAPP through Tanzania and Zambia. There are also projects aimed at strengthening internal transmission infrastructure in member utilities to enable cross-border power exchange among EAPP members and between the Eastern and Southern Africa regions. There are capacity building efforts to enhance technical and commercial capacity of the EAPP to coordinate intra- and inter-regional electricity trade and enable increased access to electricity for citizens of the Eastern Africa region. Once completed, the Tanzania-Zambia interconnector will lead to formation of one of the largest synchronized power systems in the world with 21 member countries stretching from South Africa to Libya. Interchange of power among members will lead to optimization of resources within these power pools. Co-ordinated infrastructure development will lead to efficient and effective investment in infrastructure.

Currently, there is relatively limited interconnection and trade among EAPP member countries. High voltage links are operational between Djibouti-Ethiopia-Sudan, Libya-Egypt, Kenya-Uganda, and Eastern DRC – Rwanda – Burundi, forming four (4) islanded networks in the region. However, with ongoing generation developments in Ethiopia and planned transmission interconnectors (Ethiopia-Kenya, Kenya-Tanzania, Tanzania-Zambia (EAPP-SAPP interconnection), Rusumo Falls (Rwanda, Tanzania and Burundi)), it is anticipated that the region will be fully interconnected by 2025 and a full regional market will be set up to facilitate increased power trade.

This position will be funded through a grant funding provided to EAPP by the World Bank for Technical Assistance (TA) under the Tanzania-Zambia Regional Interconnector Project (TAZA). The TA will (i) support institutional capacity building of the EAPP, including knowledge sharing between SAPP and EAPP (South-South exchange); (ii) help design and operationalize the power market and a market operator for the EAPP to facilitate short-term power trade, and (iii) strengthen the capacity of the regional regulator (IRB). The TA will support various workstreams towards operational and commercial readiness of the EAPP and member utilities for interconnected operations, regional power trade, and the interconnection with the SAPP. The detailed scope of the TA is outlined in the Tanzania-Zambia Regional Interconnector Project Appraisal Document and is closely aligned with the ongoing Bank executed Multi Donor Trust Fund (MDTF) support to the EAPP Secretariat.



B. OBJECTIVES OF THE ASSIGNMENT

The objective of the assignment is to advise the EAPP in facilitating regional power market development and commercial readiness for power trade amongst member countries while contributing to capacity building in the region. The Expert will participate in and lead various workstreams and assignments related to energy market development for EAPP, including procurement, implementation, monitoring and evaluation, and supervision of energy market activities to be conducted by different consultants hired for this project.

C. SCOPE OF WORK

The Power Market Expert shall be part of the Project Implementation Unit (PIU) of the EAPP. The Expert will assist the EAPP General Secretariat to achieve the above stated objectives, and in doing so shall carry out tasks, including but not limited to the following:

- Provide oversight of all activities related to EAPP regional power market development and offer technical and strategic advice to the EAPP GS and member utilities on related issues. The Expert will be responsible for the activities including, inter alia, the following:
 - Serve as the coordinator for the Market Working Group and support its capacity development and transitioning into a formal Market Committee
 - Design, procurement, implementation supervision, and evaluation of activities and consultancies related to energy market activities of EAPP
 - Specific supervision and follow-up of projects to:
 - Design the regional power market suitable to the EAPP needs and context, including the finalization and adoption of regional market rules by the EAPP
 - Identify the requirements for commercial readiness of national power utilities and regional frameworks, including trading agreements, settlement mechanisms, and other rules and regulations to enable power trade
 - Design, adopt, and operationalize a suitable market trading platform for EAPP
 - Liaise with the Independent Regulatory Board (IRB) in its role of confirming rules and regulating the market
 - Assessment of key capacity gaps in commercial readiness of EAPP GS and member utilities and recommendations on how to address them
- Identify and coordinate training opportunities for members of the Market Working Group and Traders as well as share with them best practices from other power pools.
- Support EAPP in knowledge sharing and confidently represent the team at relevant forums:
 - Update and provide advise to EAPP GS, member utilities and stakeholders on market design and development activities on a regular basis.
 - Represent EAPP at relevant meetings and clearly present the EAPP's position as authorized by the General Secretariat.
 - Support planning, organization, and execution of events, workshops and meetings related to EAPP's work program
 - Undertake any other functions related to efficient execution of assigned position as directed by EAPP Secretariat & the Project Manager.
 - Liaise with other technical committees if requested



- Successful execution of tasks mentioned above would require the Expert to get quickly familiarized with the EAPP's institutional arrangements and previous initiatives. Accordingly, the Consultant should:
 - Review, previously undertaken or on-going, EAPP studies related to energy markets.
 - Review relevant terms of reference, tender documents, and consultancy contract documents, the IDA Grant Agreement, and relevant World Bank guidelines.
 - Understand the institutional set up of EAPP and the Project Implementation Unit (PIU) in particular.
 - Understand the roles and responsibilities of the PIU, EAPP, technical committees etc.
 - Understand scope and modalities of on-going support and technical assistance by various development partners and ensure harmonization

D. DELIVERABLES/SPECIFIC OUTPUTS EXPECTED

In addition to the day-to-day support on energy market activities, the Power Market Expert's deliverables will include, *inter alia*:

- Inputs to Annual Procurement Plans on all energy market related activities;
- Monthly, quarterly, and yearly progress reports on all energy market related activities;
- Inputs on procurement, implementation, monitoring and evaluation for energy market activities defined in the EAPP Short - term Action Plan and the EAPP Strategic Plan;
- Record keeping (files, emails, other communication) related to all correspondences during implementation of energy market related activities;
- Project Completion Reports as inputs to the PIU Project Completion Report;
- Briefs, presentations, draft ToRs, and other relevant documentation as requested by EAPP Secretary General or Project Manager

E. Job Requirements

Applicant should have:

- A Bachelor's degree in Electrical or Electro-Mechanical Engineering, Economics, Finance, Business Studies, Mathematics, Physics or related subjects from a recognized University.
- A Master's degree in Electrical or Electro-Mechanical Engineering, Business Administration, Finance, Management, or Economics will be an added advantage.
- Minimum of 12 years of professional experience in power sector and more than 6 years in power utility with hands-on experience in power market and trade related activities.
- Professional Training or Experience in energy market trading preferably including experience with the design and operation of power pools, bilateral contract trading (PPAs), institutional strengthening (e.g. set-up of market operator), and settlement of contracts
- Working knowledge of relevant energy market clearing software/algorithms
- Financial and economic analysis skills
- Experience in competitive procurement of international consultancies



- Excellent oral and written communication skills in English. Written and oral communications skills in French will be an added advantage.
- Experience in projects financed by bilateral and multilateral donors such as the World Bank and the African Development Bank will be a major plus

F. MANAGERIAL ARRANGEMENTS

Contractually, the Power Market Expert will be functionally accountable to the EAPP Secretary General but administratively work under regular supervision of the PIU Project Manager to whom all reports and deliverables as per this TOR should be submitted.

G. RESPONSIBILITY OF THE EMPLOYER

The Employer will be providing office furniture, office equipment, stationery materials, communication facilities and other materials required by the Power Market Expert to perform his/her duties as specified in this TOR.

H. DURATION OF THE ASSIGNMENT

The duration of the assignment/service is for three years, subject to a 6 months' probation period with satisfactory performance before confirmation. Continuation to the second and third years will be subject to satisfactory performance evaluated yearly. The expected start date is September 2020. The Power Market Expert is expected to work from Addis Ababa (Ethiopia), subject to the prevailing travel restrictions at the initiation of the contract.

