

# Terms of Reference

**Technical Assistance to support the National Utility Regulator, ARME, (Agência Reguladora Multisectorial da Economia) to implement its tariff methodology through the cost of service study focused on tariff categorization.**

## **1. Introduction/Background**

The Government of Cabo Verde (GoCV) has negotiated with the World Bank a financing to implement the “Renewable Energy and Improved Utility Performance Project (REIUPP)”.

The main development objectives of the Renewable Energy and Improved Utility Performance Project financed by the World Bank are to increase renewable energy generation and improve the performance of the electricity utility in Cabo Verde by leveraging private finance. This project is composed of three components: (i) Component 1: Renewable and Efficient Electricity Service; (ii) Component 2: Advisory Services for Electricity Sector Reform Implementation; and (iii) Component 3: Project Implementation Support and Technical Assistance.

The Government of Cabo Verde, intends to apply part of the amount of said financing to carry out a consulting service (Technical Assistance) to support the National Utility Regulator, ARME, (Agência Reguladora Multisectorial da Economia) to implement its tariff methodology through the cost of service study focused on tariff categorization.

## **2. Justification**

As Cabo Verde strives to meet its ambitious renewable energy penetration goal (50% until 2030), the country is also making huge strides toward cost-reflective tariffs.

To promote private market entry in power generation, it will be important to ensure that the tariffs are sufficient to cover the payments to independent power producers (IPPs) and the utility’s overhead costs while considering affordability issues and realistic demand figures.

In response to the above, the program seeks an experienced consulting firm (“Consultant”) to support the Cape Verde Regulatory Authority (ARME) to implement its tariff methodology through the cost of service study focused on tariff categorization. The Consultant is to also offer a capacity building element enabling ARME staff to model and conduct analysis themselves facilitating frequent tariff reviews.

## **3. Scope of Work**

The objective of this assignment is to recruit a Consulting Service (a firm) to support the National Utility Regulator, ARME, to implement its tariff methodology through the cost of service study focused on tariff categorization.

The scope of work is to determine the Cost of Service for each activity (Generation/Acquisition, Transmission and Distribution/Sale segments of electricity) applying the tariff methodology approved by ARME.

### **Tasks:**

- Review current tariff structures and identify any inconsistencies and/or weaknesses regarding cost recovery
- Review of revenue requirements for each activity
- Affordability analysis and set a lifeline tariff
- Subsidy allocation strategy
- Requirements for determining: i) load profile; ii) cost for peak, and off-peak Tariffs
- Determine unbundled tariffs for the Generation, Transmission and Distribution/Sale segments and treatment of ancillary services
- Determine the Time of Use Tariff for different customer based on the costs of serving each
- Prepare a tariff model in Microsoft Excel that can be easily updated by ARME staff

The model is to include the following:

- Tariff computation for each category
  - Energy demand (projections)
  - Utility overhead costs (projections)
  - Cost of generation, transmission, distribution and sales to the utility
  - Demand charge tariff determination
  - Automatic or easy adjustment in adherence to the tariff adjustment guidelines for regular tariff adjustments in consideration of macroeconomic factors
  - Implementation of the strategies for subsidy allocation
  - Impact of the power loss reduction strategy on the tariff
  - Designed to enable the user to allocate operational subsidy to various customer categories
- Capacity building of the tariff model
  - A detailed report of the cost of service study

It will be important that the Consultant obtain accurate costs and demand figures.

The Consultant is to share user-friendly documentation detailing all tariff methodology and modeling, and to share this with ARME staff

#### **4. Required Expertise and Consultant Qualifications**

The Consultant must demonstrate the expertise required to undertake this assignment. The Consultant must meet the minimum experience and qualifications outlined below:

1. The Consultant (firm) must have ten or more years of experience conducting similar service and provide at least 3 references for successfully completed similar assignments, preferably in countries similar to Cabo Verde
2. The Consultant must have experience with capacity building/knowledge transfer particularly related to tariff methodology and modeling

The consultant's core team of experts should comprise at least the following:

##### **1. Team Leader**

Qualifications:

- At least a master's degree in Economics, Accounting, Engineering or any other relevant field from a recognized university
- Minimum Fifteen (15) years of experience in the power sector and 6 years of experience in electricity tariff matters.
- Demonstrable experience in working in countries similar to Cabo Verde
- Fluently English speak, Portuguese knowledge is appreciable

##### **2. Tariff Specialist**

Qualifications:

- At least a master's degree in Economics or any other relevant field from a recognized university
- Minimum 10 years of experience as a Regulatory Economist and 5 years' experience in electricity tariff matters,
- Demonstrable experience in working in countries similar to Cabo Verde

- Fluently English speak, Portuguese knowledge is appreciable

### **3. Regulatory Expert**

Qualifications:

- At least a master's degree in Engineering, Economics, or any other relevant field from a recognized university
- Minimum 10 years of proven experience in regulation (determination of allowed revenues and tariffs) and who has worked directly for a regulatory body.
- Demonstrable experience in working in countries similar to Cabo Verde.
- Fluently English speak, Portuguese knowledge is appreciable.

### **4. Financial Specialist**

Qualifications:

- At least a master's degree in Finance or any other relevant field from a recognized university
- Minimum 10 years of experience as a Regulatory Economist and 5 years' experience in electricity tariff matters,
- Demonstrable experience in working in countries similar to Cabo Verde
- Fluently English speak, Portuguese knowledge is appreciable

## **5. Period to Perform the Consultancy**

The assignment is expected to be fully executed during a 6 month period. All work must be completed within this timeframe.

## **6. Place to Perform the Consultancy**

It is expected that the place to perform the consultancy will be a combination of desktop work done from the Consultant's place of work and in-person meetings and knowledge transfer/capacity building performed in Praia, Cabo Verde.

## 7. Work Requirements

- Kick-off (One teleconference call with the Consultant and ARME)
- The Consultant will travel to Cabo Verde for an initial stakeholder meeting and gather the information needed to the Cost of Service Study
  - ARME will be responsible for organizing the meeting
- The Consultant will provide ELECTRA & AEB with a list of questions or additional information needed to complete the Cost of Service Study
  - ELECTRA & AEB will remain available for any questions and will provide all requested information
- The Consultant will present the cost of service study to stakeholders in Cabo Verde
  - ARME will be responsible for organizing the meeting
- The Consultant will spend two days working with ARME staff ensuring that all methodology is clear and that the models are understood and can be used and modified by ARME staff

## 8. Deliverables

<b>Reports</b>	<b>Deadline (in months)</b> (after the contract effectiveness )
Inception Report	0.5
Report on Task 1 - Review current tariff structures and identify any inconsistencies and/or weaknesses regarding cost recovery	0.5
Report on Task 2 - Determine unbundled tariffs for the Generation, Transmission and Distribution/Sale segments and treatment of ancillary services	3
Report on Task 3 - Determine the Time of Use Tariff for different customer based on the costs of serving each	4
Report on Task 4 - Prepare a tariff model in Microsoft Excel that can be easily updated by ARME staff	5
Interim report after 3 months	3
Draft final report after 5 months	5
<b>Final report</b>	6

All the reports listed above should be submitted in electronic version, in English with translates to Portuguese.

## **09. Contract Types**

A contract shall be signed, where payments of the Consultant remuneration are linked to approval of deliverables, and the payment of reimbursable expenses are made upon presentation of the receipt of the expenses occurred at the real cost.