# SWAZILAND ENERGY REGULATORY AUTHORITY

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# SUBSIDY FRAMEWORK (GUIDELINES)

**(In terms of section 21 of the Electricity Act, 2007)**

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**PREMEABLE**

***Whereas*** SADC Energy Ministers have made several pronouncements with regard to the cost of electricity.

***Having*** pronounced that tariffs in the region shall be cost reflective by the year 2019.

***SERA*** having reviewed and approved in 2014 a cost of supply study.

***Discovered*** that the then average SEC tariff was around 41% below the long run marginal cost of supply and further it was revealed that the then tariff structure did not reflect the marginal cost of supply for almost all of the customer categories.

***Acknowledging*** the commitments that Swaziland has made as a member of the Southern African Development Community (SADC) to remove cross subsidies among customer categories and bring SEC tariffs to cost reflective levels for the different categories of consumer and at the same time develop a subsidy scheme for poor households to protect them from tariff increases and to enhance electricity access at affordable rates, the following guidelines are hereby promulgated.

**PART 1**

**1. SHORT TITLE**

These Guidelines may be cited as the Subsidy Framework Guidelines made in terms of section 21(2) of the Electricity Act of 2007 hereinafter referred to as the Guideline.

**2. PURPOSE**

The purpose of the Subsidy Framework Guidelines is to remove cross subsidies among customer categories, to bring Swaziland ESI tariffs to cost reflective levels for the different categories of consumers, to send correct signals to consumers in terms of their consumption levels and behaviour, and, to develop a subsidy scheme for poor households to protect them from tariff increases and to enhance electricity access at affordable rates.

## 3. DEFINITIONS

**Cost of Supply Study/ Cost of service**: A study conducted to determine the cost involved in supplying a unit of power to a particular customer.

**Cross-subsidy**: A subsidy paid by one customer category, to ease the burden for another.

**Disabled people:** People with physical limitation and cannot effectively take care of themselves as a result of the physical limitation.

**Guidelines:** Refers to The Subsidy Framework Guidelines which guides the implementation of tariff support to vulnerable customers. It is also referred to as Subsidy Framework.

**Household:** A domestic customer. A typical household constitute, on average of five people on average.

**Increasing Block Tariff:** A tariff structure designed such that the cost per unit increases as consumption level increases.

**Levy:** A tax charged per unit of electricity consumed.

**Lifeline:** A tariff category designed to carter for vulnerable customers.

**Network Licensee:** Any entity that may from time to time be designated and licensed to carry any activities that fall within the electricity industry value chain.

**Service Provider:** Any entity that provide electricity services to the end user customers.

**Subsidy:** A support given to vulnerable customers to enable them to afford the cost of electricity.

**Subsidy Framework:** *See Guidelines above*.

**Vulnerable people:** This refers to people who are prone to price increases, as they impact on their ability to pay. This includes aged people, child-headed families and other impoverished people who are unemployed.

## PART 11

## 4. TARIFF METHODOLOGY PRINCIPLES

The Guidelines have been developed in line with the principles of the Tariff Methodology. The principles are outlined in the table below and addresses the various stakeholders in the Electricity Supply Industry.

*Table1: Tariff Principles 1*

| Expectations | Tariff Objectives | Description |
|---|---|---|
| Customer | 1. Affordable | Least cost options (price should exclude inefficiencies) |
| | 2. Non discriminatory | Tariffs should be applicable to all customers on an equal and fair basis |
| | 3. Predictable & Stable | Customers should be kept informed and real price adjustments should be gradual |
| | 4. Transparent | Easy to read and apply, and contains no hidden costs |
| Utility | 5. Cost Reflective | Cover the costs of the business plus a return (profit) component |
| | 6. Encourage efficient use | Appropriate price signals that will stimulate efficient use of electricity |
| | 7. Implementation cost | Implementation and transaction costs should be low |
| Government | 8. Social Support | Tariff levels and structures should accommodate social programmes |
| | 9. Self sufficiency in generation capacity | Expansion through development of own resources |
| | 10. SOE's to be self funding | ESI should not rely on Government for funding |
| | 11. Shareholder expectations | Appropriate taxation & dividends |

## 5. THE LEGAL FRAMEWORK

The Guideline has been developed within the scope of the Electricity Act, 2007. In terms of the Electricity Act, 2007, tariffs shall be regulated in accordance with section 32 of this act. The section reads thus;

*"Prices ... shall be regulated ... according to one or more of the following tariff methodologies, which shall:*

- *allow a licensee that operates efficiently to recover the full costs of its business activities, including a reasonable return on the capital invested in business;*
- *provide incentives for continued improvement in respect of technical and economic efficiency with which services are provided;*
- *provide incentives for continued improvement of quality services;*
- *give to consumers proper signals regarding the costs that their consumption imposes on the business of the licensee; or,*
- *avoid undue discrimination between consumers and consumer categories."*

## 6. THE GENERAL TARIFF STRUCTURE

The electricity tariffs in Swaziland are basically made of one or more of the following charges:

**Facility Charge**
The facility charges, payable whether any electricity is used or not, are being increased to more accurately reflect the fixed customer specific costs associated with the various supplies.

**Energy Charges**
The energy charge is for all electricity consumption during billing month which shall be as near to the calendar month as convenient to the Licensee.

**Maximum Demand Charges**
Maximum Demand shall be the power recorded over any thirty minutes' period by a kVA demand indicator.

**Access Charge**
Access charge is based on the highest of the previous 12 months' maximum demand.

**The Tariff Structure**

*Table 2: The Tariff Structure 1*

| Type | NON-TOU TARIFFS | Facility Charge E/Month | Energy Charge c/kWh | Demand Charge E/kVA | Access Charge E/Month |
|---|---|---|---|---|---|
| S10 | Life Line | | x | | |
| S1 | Domestic | | x | | |
| S2 | General Purpose | x | x | | |
| S3 | Small Commercial – prepayment | x | x | | |
| S3 | Small Commercial - credit meter | x | x | | |
| K4 | Small Holder Irrigation | x | x | X | x |
| K5 | Large Commercial and Industrial | x | x | X | x |
| K6 | Large Irrigation | x | x | X | x |

| TOU TARIFFS | T1<br><br>TOU at MV at HV network | T2<br><br>TOU at MV | T3<br><br>TOU at LV | T4<br><br>TOU small irrigation < 100 kVA |
|---|---|---|---|---|
| Facility Charge E/month | X | x | x | X |
| Demand Charge E/kVA | X | x | x | X |
| Access Charge E/kVA | X | x | x | X |
| Energy c/kWh | X | x | x | X |

## 7. TARIFF DESIGN OF THE SUBSIDY FRAMEWORK

The aim of the subsidy framework is to cushion the vulnerable customers as the industry migrates towards a more cost reflective tariff. This means that the Framework is meant to take care of a certain category of domestic customers, herein classified as Lifeline Customers.

### 7.1. Lifeline tariff design

A Lifeline program provides a discount on essential services to qualifying low-income consumers to ensure that all Swazi households have the opportunities and security that utility services bring. Lifeline is part of the Universal Access Initiative pursued through the Rural Electrification Programme. The Lifeline program is available to eligible low-income consumers.

The lifeline tariff is designed to be an increasing block tariff with three blocks. Increasing block tariff (IBT) means that the applicable rate differs according to level of consumption. For the Lifeline Category, the three blocks are explained below:

1. The first block will be a subsidised energy charge in E per kWh for consumption levels up to 75 kWh per month.

2. The second block will be a cost reflective energy charge and it will apply to every unit consumed in excess of 75 kWh per month and up to 150kWh per month.

3. The third block will apply to every unit consumed in excess of 150 kWh per month. The third block has been added as a control mechanism to discourage spurious applications for the lifeline tariff category. It will be a very high tariff that will set the average tariff for the lifeline category higher than the domestic tariff for levels of consumption higher than 150kWh per month. The tariff for this block shall be calculated from time to time to breakeven with the domestic category.

### 7.2. Rationale for the subsidized block

The 75 kWh per month that will be subsidised are considered adequate to cover the basic needs of poor households (i.e. lighting, sporadic ironing, sporadic operation of TV/radio/laptop, hot plate, operation of a small fridge). The volume of consumption that will be subsidised targets the consumption of basic electricity needs (as they were described above) and does not cover electricity volumes for heating and cooling.

*Table 3: Size of the Subsidy*

| Item | No. of items | Capacity (W) | Hours used (per day) | days used (per month) | Energy used (kWh per month) |
|---|---|---|---|---|---|
| CFLs | 4 | 10 | 4 | 30 | 4.8 |
| 19" color TV | 1 | 70 | 6 | 30 | 12.6 |
| Radio | 1 | 4 | 3 | 30 | 0.36 |
| Iron | 1 | 1000 | 2 | 4 | 8 |
| Fridge (small) | 1 | 100 | 4.7 | 30 | 14.1 |
| Kettle | 1 | 2000 | 0.3 | 30 | 18 |
| Electronic Gadgets | 1 | 35 | 2 | 30 | 2.1 |
| Stove | 1 | 1500 | 0.3 | 21 | 9.45 |
| Security Lamps | 2 | 10 | 10 | 30 | 6 |
| | | | | | 75.41 |

### 7.3. The Size of the Subsidy

Prior to cost-reflectivity in tariffs, the Lifeline tariff shall be subsidized by not more than 40% from the prevailing tariff of the domestic category.

Once cost-reflectivity has been achieved, the subsidy amount shall not exceed 40% of the cost-reflective tariff of the domestic category.

## PART 111

## 8. ELIGIBILITY AND APPLICATION

### 8.1. Eligibility for Beneficiaries

The Guideline is targeting consumers that cannot afford to pay the actual cost of electricity supply (i.e. poor households), specific eligibility criteria should apply. These should focus on identifying who is in actual need of the subsidy. Unfortunately, Swaziland does not have social programmes which already identify poor and vulnerable households. Therefore, a technical mechanism has been developed, for initial screening, to target needy consumers.

The suggested mechanism is the maximum expected level of consumption for poor households who are efficient in the use of electricity. Customers who exceed **within a tariff year an average amount higher than 150 kWh per month will fall in the third block which has a higher tariff and hence will involuntary resort to efficiency or apply for reclassification to Domestic Category.**

At the end of each tariff year, the Licensee shall evaluate the eligibility of those in the Lifeline based on the monitoring and evaluation procedures set in section 8.3. Any customers who no longer meets the criteria for Lifeline category shall be transferred to the domestic category.

Prepaid meters will be a prerequisite for all customers who wish to apply for the lifeline tariff.

The following social groups may qualify as beneficiaries of the tariff support:

- Child- headed households (orphans)
- Aged people households
- Physically challenged people households
- Vulnerable/ impoverished households

**8.2. Application Process/ Screening**

Currently, residential customers constitute a huge proportion of customers connected to the grid. The Service Provider has historical data for the consumption of all of those customers and this data will also be considered in initial screening process. All customers who want to be in the Lifeline category shall follow the defined application process.

*8.2.1. The Application Process*

A customer who meets the Lifeline qualification criteria, can apply for being in the Lifeline category. The customer shall fill an application form, available at any office of the Service Provider, office of the Regulator or website of the Service provider or Regulator.

The customer should then send this form, by physical means or by electronic means to the Service provider, together with proof that he/she is vulnerable. Such proof may be a proof of household income, certification by Community Authority or any statutory national body which has the power and authority to determine people's socio-economic status.

In the event the customer's current average consumption is above 150 kWh per month, the customer must make an undertaking to reduce his/ her consumption, so that it is in line with the defined Lifeline category. No qualifying customer shall be disadvantaged by past consumption pattern.

A customer classified as Lifeline customer shall, on an annual basis, update his/ her data file with the Service provider for monitoring and evaluation purposes. Failure to update information after three consecutive reminders, and three months after the set date has elapsed, shall lead to the customer disqualified from the Lifeline category and the customer shall from the date of disqualification be classified as domestic. The prevailing domestic tariff shall be prospectively applicable thereon.

**8.3. Monitoring and Evaluation**

*8.3.1. Total number of beneficiaries*

The Service Provider must keep a comprehensive register of customers who are beneficiaries of the Subsidy Framework. The register must give sufficient details about where they are located, socio-economic status and an indicative total household income per annum.

The Service Provider shall report to the Regulator, as per defined reporting frequency, on changes in the number of beneficiaries of the Subsidy Framework.

*8.3.2. Review of socio-economic status of Beneficiaries*

The Service Provider shall, from time to time, review the socio-economic status of the beneficiaries of the Subsidy Framework to ensure that they still meet the criteria for being beneficiaries.

*8.3.3. Achievement of the guidelines objectives*

The Service Provider must provide the Regulator with all necessary information that will help the Regulator to determine if the objectives of this guidelines are being met.

### 8.4. Change of Social/ Economic Status of Beneficiary

In the event a customer previously classified under Lifeline category no longer meets the criteria for such classification, such customer must be informed in writing that he/she no longer qualifies and be reclassified to the domestic category.

The domestic tariff shall from the day of reclassification be applicable prospectively to that particular customer.

The utility shall, on request of a customer classified as Lifeline customer, reclassify the customer as a domestic customer. Once a customer has requested to be classified as domestic, he/she cannot be automatically reclassified as Lifeline customer. The application and screening procedures shall apply if the customer later on requests for reclassification as Lifeline customer.

### 8.5. Disqualification from the Life Line Category

A customer, may be automatically and without prior notice be disqualified from the Lifeline category if he/she is engaged in the activities listed below. The utility will thereafter inform the customer that he/she has been disqualified from the Subsidy scheme.

- Tempering with system/ its components
- Default in payments, if any, after sufficient letters of demand have been sent
- Any dishonest behaviour pertaining use of electricity or grid infrastructure
- Failure to comply with subsidy scheme requirements (e.g. data update)

### 8.6. Other Customer Categories

The Regulator can, from time to time, identify other customer categories which are vulnerable and needs tariff support. In such cases, the Regulator, after consultation with stakeholders, and subject to availability of resources or capacity of subsidy paying categories, may decide to subsidize such customer categories.

These customer categories should be those identified with a potential of boosting the country's economy and are not for luxury of the customers.

The tariff support awarded to those customers shall not be a permanent entitlement, it shall be time-bound, and based on economic projections to enable those customers to be self-sufficient.

The Regulator can further exempt these customers from paying a subsidy or levy as per the provision of section 9.1.

## PART IV

## 9. FUNDING STRATEGY

The financing of the subsidy has to be internal to the electricity sector. This is specified in Objective 10 of SERA's *Tariff Methodology*, which in turn reflects the fact that government may not have funds to support a tariff subsidy scheme and donor funding is oriented towards increasing electricity access. The internal funding of the subsidy is to be achieved through a cross-subsidy, either involving all electricity consumers or consumer categories who can afford to pay.

In the Subsidy Framework Study, alternative funding strategies were evaluated, results were distilled into 3 main options which were then investigated into detail. Below are the two options investigated:

- ***Financing option 1* – Social Support (SS) Levy on all electricity consumers** (excluding the lifeline customers) to recover the amount needed for the subsidy. The SS levy will be a uniform energy charge (Ec/kWh) adequate to recover the required revenues for the subsidy.

- ***Financing option 2* – Implicit cross subsidy from all customer categories excluding the lifeline customers and other vulnerable customers** (i.e. Small Commercial – prepayment, Small Irrigation and TOU small irrigation <100kVA). A uniform energy charge (Ec/kWh) adequate to recover the required revenues for the subsidy will be added to the tariff of the customer categories that will be paying the subsidy.

- ***Financing option 3*- Fiscus financing in which the government will fund consumption by poor consumers.**

The following table presents the tariff categories that will pay for the subsidy in each financing option and the tariff categories that receive the subsidy (i.e. the lifeline tariff category).

**Table 4 Customer categories providing/receiving the subsidy**

| Tariff category | | Tariff categories providing the subsidy | | Tariff categories receiving the subsidy | |
|---|---|---|---|---|---|
| | | Option 1:<br>SS Levy | Option 2:<br>Cross subsidies | Option 1:<br>SS Levy | Option 2:<br>Cross subsidies |
| S10 | Lifeline | x | x | √ | √ |
| S1 | Domestic | √ | √ | x | x |
| S2 | General Purpose | √ | √ | x | x |
| S3 | Small Commercial – PP | √ | x | x | x |
| S3 | Small Commercial- CM | √ | √ | x | x |
| K4 | Small Irrigation | √ | x | x | x |
| K5 | Large Comm. and Ind. | √ | √ | x | x |
| K6 | Large Irrigation | √ | √ | x | x |
| T1 | HV TOU | √ | √ | x | x |
| T2 | MV TOU | √ | √ | x | x |
| T3 | LV TOU | √ | √ | x | x |
| T4 | TOU small irrigation <100kVA | √ | x | x | x |
| S0 | Street lighting | √ | √ | x | x |

Apart from the fact that SERA has chosen to exclude some customer categories in the second financing option, the main difference between the two options is that a levy would appear separately on consumers bills, whereas in the case of cross subsidies, the payment would be implicit within the tariff. If we ignore the fact that SERA has chosen to exclude some customer categories in the second financing option, the uniform energy charge would be the same both in options 1 and 2. Whether by SS levy or by cross-subsidy, the suggested scheme will have a revenue neutral impact on Service Provider's revenues.

The level of the SS levy or the cross subsidy is set ex-ante on an annual basis based on the forecast revenue deficit and the forecast sales. The reconciliation between the forecast and the actual values (i.e. forecast sales, forecast number of customers, etc.) will be incorporated into the Revenue Requirement for the year thereafter following the procedures determined in the SERA tariff methodology. The model for the calculation of the SS levy is provided in Annex 1.

Any shortfall or excess subsidy revenues due to estimation, shall be accounted for in the next tariff review as an under/ over-recovery and in accordance with the Tariff Methodology.

### 9.1. Exemption from paying Levy/ Cross-subsidies

Customers categorised as Lifeline are automatically exempted from the Levy as defined in this document. This exemption does not include other levies that may be effected from time to time for other purposes.

Other customers identified as vulnerable may, on the discretion of the Regulator and through a consultative process, be exempt from paying levies and subsidies. This exemption does not apply to other levies that Local or National Authorities may, from time to time, effect for other purposes.

## PART V

# 10. IMPLEMENTATION AND DURATION

### 10.1. The Guidelines Implementation Plan

A Subsidy Framework Implementation Plan, articulating how the removal of subsidies, rebalancing of tariffs, and operationalization of this Framework will be done, shall be prepared prior to operationalization of the Framework. The implementation Plan is subject to review if, according to the opinion of the Regulator, prices are unstable, changes at an alarming rate, or new conditions warranting its review have occurred.

If a review of the plan becomes necessary, the Regulator shall inform all stakeholders of the new circumstances warranting the review of the Plan and the revised Plan shall be made public knowledge.

The revised Plan shall be made effective by the next earliest tariff adjustment date i.e. the next 1st April as per the Tariff Methodology.

### 10.2. Effective Date of the Framework

This Framework shall be effective from the date prescribed in the Subsidy Framework Implementation Plan.

### 10.3. Cease Date of Guidelines

This Guidelines shall be valid until the Regulator or any Authority that may assume the duties of the Regulator in the future, decides that the objectives of the guidelines have been achieved.

# 11. INTERPRETATION OF THE DOCUMENT AND DISPUTE RESOLUTION

Disputes between Customers and Service Providers shall be directed to the SERA and be dealt with in accordance with SERA's Dispute Resolution Procedures.

# 12. AMENDMENT OF THE GUIDELINES

This Framework shall be amended if in the view of the Regulator, a provision of this Framework is inconsistent with a supreme law or Act, or if there are new industry developments warranting a review of a section in this document.

Any amendment of this Framework must be in line with the Energy Regulatory Act and the Electricity Act.

The Authority shall consult all relevant stakeholders when considering an amendment of this document, whether in part or in full.