THE DRAFT ENERGY (ELECTRICITY RELIABILITY, QUALITY OF SUPPLY AND SERVICE) REGULATIONS, 2024

(Pursuant to Sections 167 and 208 of the Energy Act, 2019)

REGULATORY IMPACT STATEMENT

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1. THE ENERGY (ELECTRICITY RELIABILITY, QUALITY OF SUPPLY AND SERVICE) REGULATIONS, 2024

The Draft Energy (Electricity Reliability, Quality of Supply and Service) Regulations, 2024 (**the Regulations**) have been developed pursuant to the provisions of Sections 167 and 208 of the Energy Act, 2019 (**the Act**) which provides thus, '*The Cabinet Secretary may upon recommendation* of the Authority make such regulations as may be necessary or expedient for the achievement of the objectives and purposes of this Act and in particular, prescribing standards relating to reliability and quality of supply, quality of service, including obligations and rights of licensees and consumers as well as penalties in events of default. Once approved, the Regulations will form part of the subsidiary legislation to the Act and shall govern the electricity reliability, quality of supply and service in Kenya.

2. PURPOSE AND INTENDED EFFECT

2.1 Purpose of the Statutory Instrument

The Draft Energy (Electricity Reliability, Quality of Supply and Service) Regulations, 2024 seek to operationalize Section 167(1)(L) of the Energy Act, 2019 (the **Act**). These regulations lay down detailed requirements for safeguarding reliable and quality electricity supply and quality services offered by generators, transmitters, distributors, and retailers of electricity.

These regulations provide for among other things, reliability and quality of supply performance standards, quality of service standards for system operator, generation, transmission, and distribution/retail supply licensees, data and reporting requirements, as well as compliance monitoring and enforcement actions.

2.2 Legislative Context

Quality of supply and service is provided for in various pieces of legislation. The Constitution being the supreme law of the land provides for the reliability and quality of supply as well as quality of service of electricity in Kenya implicitly, by providing laws relating to the consumer. Article 46 (1) of the Constitution of Kenya, 2010 provides that:

"Consumers have the right to goods and services of reasonable quality; to the information necessary for them to gain full benefit from goods and services; to the protection of their health, safety, and economic interests; and to compensation for loss or injury arising from defects in goods or services."

Further, section 5 of the Consumer Protection Act, 2012 provides for the right of the consumer to quality goods and services by stating that "the supplier is deemed to warrant that the goods or services supplied under a consumer agreement are of a reasonably merchantable quality".

Sections 137 and 141 of the Act require licensees to collect, analyse and maintain data, information and statistics relating to their undertakings to enable them monitor and report to the Energy and Petroleum Regulatory Authority (the Authority) on the reliability and quality of supply as well as quality of service. Further, section 166 of the Act provides for penalties and compensation for failure and defects in electricity supply. Section 167(1)(L) of the Act provides, "'The Cabinet Secretary may upon recommendation of the Authority make such regulations as may be necessary or expedient for the achievement of the objectives and purposes of this Act and in particular, prescribing standards relating to reliability and quality of supply, quality of service, including obligations and rights of licensees and consumers".

The Draft Energy (Electricity Reliability, Quality of Supply and Service) Regulations, 2024 are to give effect to this section of the Act.

The Regulations have been formulated by the **Authority** pursuant to the provisions of Section 208(2) of the Act that gives such power to the Authority.

3. BACKGROUND

Reliability and security of electrical power systems is a very important driver of socioeconomic development. Various factors play a crucial role in determining the reliability and quality of electricity supply and service. One such factor is the adequacy of electricity generation, ensuring that there is enough power and energy available to meet demand. Additionally, the condition and maintenance status of power system infrastructure contributes significantly to the reliability of electricity supply. Another important aspect is

the financial and operational performance of utilities, along with the regulatory framework governing the energy sector. The Act requires licensees to collect, analyse and maintain data and statistics for reporting to the Authority. The Act further gives the Cabinet Secretary the powers to formulate regulations prescribing standards relating to reliability and quality of supply and quality of service, including obligations and rights of licensees and consumers, as well as penalties in the event of default.

The Draft Energy (Electricity Reliability, Quality of Supply and Service) Regulations, 2024 provide for among other things, guaranteed performance standards, compensation by licensees, exceptions to penalties and compensation payment, customer service charter and a supply contract, circumstances under which the supply of electricity to a consumer can be interrupted, reconnection of supply to a consumer, provision of information to consumers by the licensee, handling of complaints by the licensees, as well as provision of information to the Authority.

4. ELECTRICITY RELIABILITY, QUALITY OF SUPPLY AND SERVICE REGULATORY IMPACT ASSESSMENT

In 2023, the Authority commissioned the Electricity Reliability, quality of supply and quality of service Regulatory Impact Assessment (RIA) Study (**the study**) to identify the potential economic, environmental, and social impacts of the draft Energy (Electricity Reliability, Quality of Supply and Service) Regulations, 2023. The study involved: a review of recent publications and academic literature on electricity reliability, quality of supply and quality of service; desktop benchmarking and comparative analyses of other jurisdictions/states with similar frameworks specifically Uganda, Ghana, Delhi, Rwanda, United Kingdom (UK) and Chile; and finally, stakeholder mapping and engagement. The stakeholders engaged in the exercise were utility generation, transmission, and captive generation licensees, generation and retail supply licensees supplying commercial and industrial (CI) consumer, mini grid owners/operators, as well as consumer/sector and professional organisations/associations. The feedback mechanism involved a two-stage process where the information gathering tool was sent to the stakeholders beforehand and an interview conducted afterwards.

4.1 Objectives of the Regulations

The principal objective of the Regulations is to give effect to Section 167(1)(L) of the Act. The Regulations lay out a framework to promote the provision of a reliable and quality supply of electricity, and quality services offered by generators, transmitters, distributors and retailers of electricity.

The specific objectives of the Regulations are:

- Provide for the performance standards for reliability and quality of supply of electrical energy as well as quality of service.
- (ii) Provide guidelines on the nature, type and format of data, information and statistics to be provided to the Authority by Licensees on reliability and quality of supply as well as quality of service.
- (iii) Set out what would constitute defaults by licensees in the quality of supply and service of electrical energy to consumers.
- (iv) Provide for the circumstances under which the Authority may impose penalties for failure to meet performance standards and reporting requirements.
- (v) Prescribe penalties to be imposed for defaults in supplying electrical energy to any consumer and circumstances under which the licensee shall be exempted from such penalties.
- (vi) Provide for the circumstances under which a person will be entitled to compensation due to failure and defects in electricity supply.
- (vii) Establish the mode of compensation and computation of compensation in cases where a consumer incurs damage as a result of failure, poor quality or irregularity of electricity supply by a licensee.
- (viii) Provide for the circumstances under which a person will be disqualified from compensation due to failure and defects in electricity supply; and
- (ix) Provide the procedure, timelines and documentation required for claiming for compensation by the affected person to the licensee and the procedure for compensation.

4.2 Salient Outcomes of the RIA Study

Some of the key findings of the study were as follows:

- (i) Distribution and retail supply licensees should possess a regularly revised customer service charter and supply contract, both approved by the Authority at least once every three years.
- (ii) A customer(s) should be notified of any planned interruption of supply by a distribution and retail supply licensee at least forty-eight (48) hours before the time of commencement of the planned interruption via electronic mail, SMS and distribution or retail supply licensee website. In the case of an emergency situation, the supply may be interrupted without notice to the consumer(s). However, the licensee would then be required to notify the consumer(s) through electronic mail or SMS, within two (2) hours after such disconnection, the nature of the emergency and the estimated restoration time.
- (iii) The system operator should report annually to the Authority on planned outages by generators, transmission, and distribution licensees. The system operator should also submit a service level charter.
- (iv) The generation, transmission or distribution licensees should operate in compliance with the Grid Code, their Power Purchase Agreement (PPA), conditions in their generation, transmission or distribution licence, network service contract and any other applicable laws and standards. The licensees should also report in writing any forced outages affecting a generator, transformer exceeding 20 MVA, substation or transmission line not later than forty-eight (48) hours after their occurrence.
- (v) A licensee should collect, analyse and maintain such data, information, and statistics relating to its undertaking to enable it monitor and report to the Authority on the reliability and quality of supply as well as quality of service.
- (vi) A licensee should establish and submit measurement systems and methods to the Authority annually for approval.

- (vii) A distribution licensee who holds a retail supply licence should submit the reliability and quality of supply and service indicators (CAIDI, SAIFI, SAIDI) monthly and annually to the Authority.
- (viii) A distribution licensee who holds a retail supply licence should submit to the Authority biannual reports on distribution energy losses with aggregated information on losses.
- (ix) A distribution licensee should undertake a study of the distribution system at least once every three (3) years to determine the technical and non-technical losses.
- (x) Licensees should be accountable for compensating individuals who suffer property damage, financial losses, or loss of life due to electricity supply failures or irregularities provided that the breach is reported in writing within thirty (30) days of the breach. A claim for compensation should be made within twelve (12) months of the breach in respect of which the claim is made. Further, compensation should be paid within three (3) months after determination of the claim.
- (xi) Some lessons were learnt from the review of other jurisdictions which were included in the proposed draft regulations. Some of the practices include having realistic performance standards, requirements for data and reporting, enumerated schedule of offences and a proper compensation of aggrieved consumers from defaulting licensees.

5. COSTS AND BENEFITS OF THE REGULATIONS

5.1 Economic Impacts

Implementation of the Regulations will have significant economic consequences to the electricity sub-sector in Kenya. Some of the beneficial impacts that may result include:

(i) The regulations will enhance the smooth flow of commerce within and across businesses, industries, and entire sectors of the economy. In other words, when a supplier of goods or services has reliable and high-quality supply of electricity, their production subsequently continues as planned and this has a positive economic ripple effect on both the suppliers and customers.

- (ii) The regulations may spur the growth of the economy due to reliability of power supply to industrial and jua-kali sectors.
- (iii) Improved reliability will reduce the need to run expensive backup generators. Thus, the cost of manufacturing and provision of other services will reduce making the products more competitive.
- (iv) Reduction in losses and maintenance costs associated with machine breakdown due to poor quality of electricity supply.
- (v) Improved quality of electricity supply and reliability can attract investment in various industries thus, fostering economic growth.
- (vi) Consumers would benefit by having improved health due to reduced use of unhealthy energy sources such as paraffin at home.
- (vii) The regulations are likely to inculcate certainty in the electricity industry and bring in professionalism required in the sector.
- (viii) Both licensees and electricity consumers may enjoy more favourable asset insurance premiums due to lower risk rating perception by under-writers.
- (ix) With improved supply quality and reliability, licensees would enjoy increased revenue thus, enhancing their financial stability.
- (x) Consumers who might have opted to migrate from the grid to own-generation may connect back to the grid resulting in increased customer base for the licensees and hence, increasing their revenue base.

The regulations are likely to have the following economic repercussions:

- (i) For licensees to be compliant with the regulations, it may require investments in infrastructure, maintenance, and technology to improve supply quality and reliability. Failure to meet regulatory standards can result in penalties and fines imposed by the Authority which would negatively affect the financial performance of the licensees. This could lead to licensees applying for tariff adjustments to cover the costs of compliance.
- (ii) The Distribution and Retail Supply licensees may see an increase in compensation claims by consumers initially after implementation of the regulations. In addition,

there may be increased cases of complaints/disputes to be resolved by the Authority. However, the compensation claims would be expected to ease out as the licensees improve their networks and comply with the Guaranteed Performance Standards. Thus, to deal with the initial spike in claims, it may be necessary for the licensees to have some staff members specifically dedicated to handling the compensation claims thus, increasing the administrative costs for both the licensees and the Authority.

5.2 Social Impacts

The social impacts that may result from the implementation of the Regulations include:

- (i) Consumers are likely to experience fewer power outages, better voltage regulation, and improved service quality, leading to enhanced convenience and quality of life.
- (ii) With guaranteed quality and reliable supply, the consumers would be willing to invest in appliances that improve their quality of life further like refrigeration and electric cooking appliances, enabling them to be economically productive.
- (iii) As licensees invest in infrastructure upgrades, more remote and underserved areas may gain access to electricity, contributing to social development and economic inclusion.
- (iv) Investments in infrastructure upgrades and maintenance can create job opportunities in the construction, engineering, and maintenance sectors.
- (v) Reliable electricity would mean that health facilities in the country would have electricity for various operational needs hence, able to meet their mandate.
- (vi) Improved consumers perception of the utility.

5.3 Environmental Impacts

The environmental impacts that may result from the implementation of the Regulations include:

(i) Reduced emissions due to reduced use of standby diesel generators.

- (ii) Electricity reliability and quality of supply can encourage utilities to invest in renewable energy sources and other clean energy technologies, which can help to reduce greenhouse gas emissions.
- (iii) Investments in grid improvements and modern technologies can lead to energy efficiency gains, reducing overall energy consumption and environmental footprint.

6. COST OF IMPLEMENTATION OF THE REGULATIONS

Enhancing the reliability of power systems will promote a higher standard of service and reduce the frequency of power interruptions, which frequently result in decreased productivity within the commercial and industrial sectors. Implementation of these regulations could have the following financial impacts on the licensees.

- (i) Compliance with regulations entails investments in infrastructure and technology, potentially leading to tariff adjustments and penalties for non-compliance.
- (ii) The licensees will be required to upgrade their systems to provide quality supply of electricity. They might also need to budget for payment of penalties.
- (iii) If the regulations impose substantial penalties for failure to meet performance standards, licensees could face financial challenges if they repeatedly fail to comply. This could include fines, licence revocations, or other punitive measures.
- (iv) The licensees may need to put in place insurances for compensation claim risks.
- (v) The licensees will require to invest in competent personnel and equipment's and tools for monitoring.
- (vi) The additional reporting requirements provided for in the regulations will impose extra costs on licensees. However, the costs may be absorbed in the licensees' operations and maintenance budget.
- (vii) The initial increase in compensation claims and disputes may require additional staff and administrative costs, but these are expected to decrease over time as networks improve and performance standards are met.
- (viii) There will be compliance cost, legal and human resource challenges.

7. CONCLUSION AND RECOMMENDATIONS

As per the provisions of Section 7 of the Statutory Instruments Act, this Regulatory Impact Statement has highlighted the objective and reasons for the regulations; the economic, social, and environmental impacts of enacting the regulations; the financial impacts that will arise from implementation of the reliability, quality of supply and service regulations.

The Regulations create an inter-dependent framework that involves the Authority, the licensees, and consumers to ensure that reliability and quality of electricity supplied as well as the quality of service by the licensees are regulated to allow the players reap the benefits of this arrangement within the legal frameworks.

The recommendation is that upon the incorporation and/or consideration of all stakeholder feedback, the regulations be presented to the Cabinet Secretary.

8. IMPLEMENTATION AND REVIEW

The Authority will implement the Energy (Electricity Reliability, Quality of Supply and Service), Regulations 2024 through gazettement in the Kenya gazette. Review shall be done as per the provisions of the **Statutory Instruments Act No. 23 of 2013** and in consultation with all stakeholders.