

# **STATUTORY INSTRUMENT**

Supplement to the Sierra Leone Extraordinary Gazette Vol. CXLX, No. 91  
dated 13th December, 2019

## **ELECTRICITY AND WATER LICENCING RULES, 2019**

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**STATUTORY INSTRUMENT NO. 10 OF 2019**

*Published 13th day of December, 2019*

**SIERRA LEONE ELECTRICITY AND WATER  
REGULATORY COMMISSION ACT, 2011  
(ACT NO. 13 OF 2011)**

ELECTRICITY AND WATER LICENCING RULES, 2019

**Short title**

In exercise of the powers conferred upon it by section 66 of the Sierra Leone Electricity and Water Regulatory Commission Act, 2011, the Commission makes the following Rules –

**PART I – PRELIMINARY**

**1.** In these rules, unless the context otherwise requires –

**Interpretation**

“Act” means the Sierra Leone Electricity and Water Regulatory Commission Act, 2011;

“ancillary service” means black start, reactive power, frequency control and such other services as any electricity system operator may be required to have available as ancillary services pursuant to the law relating to the grid or any agreement with a licensee primarily for the purpose of securing stability of operation on the transmission system;

“authorised representative” means any person authorised by an applicant to represent the applicant in matters before the Commission;

“Commission” means the Sierra Leone Electricity and Water Regulatory Commission established under section 3 of the Act;

“Corporate Affairs Commission” means the Corporate Affairs Commission established under section 2 of the Companies Act 2009

“distribution system” means all electricity plant and equipment within Sierra Leone that functions or are operated at a medium to low voltage, currently at 69 kV and below, together with any associated feeder or supply equipment that are for shared or common use and transport electricity from a transmission system or a generation station or other points to the point of delivery to consumers in an area delineated by the Commission;

“Electricity Distribution and Supply Authority (EDSA)” mean Electricity Distribution and Supply Authority established under section 25 of the National Electricity Act 2011;

“Electricity Generation and Transmission Company (EGTC)” mean Electricity Generation and Transmission Company established under section 2 of the National Electricity Act 2011;

“Guma Valley Water Company (GVWC)” means the Guma Valley Water Company established under section 2 of the Guma Valley Water Company Act 2017;

“licensee” means any person who holds a licence issued by the Commission;

“National Water Resources Management Agency (NWRMA)” means the agency established under section 2 of the National Water Resources Management Agency Act 2017;

“person” includes an individual, a company, partnership or any association of individuals, whether incorporated or not;

“prudent utility practice” means any practice, method and act engaged in or approved by a significant portion of electric utility industry

during a relevant time period or any practice, method or act that in the exercise of reasonable judgment in the light of facts known at the time of the decision, could have been expected to accomplish the desired result at a reasonable cost, consistent with good business practices, reliability, safety and expedition;

“Sierra Leone Water Company (SALWACO)” means the Sierra Leone Water Company established under section 2 of the Sierra Leone Water Company Act 2017;

“transmission system” means the system consisting of extra high voltage electric lines having design voltage of 69 kV and higher to transmit electricity for the purposes of the transportation of electricity from one power station to a substation or to another power station or between substations or to or from any external interconnection including 33 and 11 kV bays and equipment up to the interconnection with the distribution system and any plant and apparatus and meters owned or used in connection with the transmission of electricity, but shall not include any part of a distribution system.

**2.** (1) Subject to sub-rule (2) these rules shall apply to regulated suppliers in the water and electricity sectors.

## **Application of Rules**

(2) These rules shall not apply to –

(a) an electricity mini-grid or off-grid system;

(b) an electricity generation plant whose output is solely for the use of the producer; or

(c) production and distribution of water other than through pipelines.

## **PART II – APPLICATION FOR A LICENCE AND OTHER RELATED PROVISIONS**

### **3. A person shall not –**

### **Requirement for electricity licence**

(a) construct, install and operate facilities for the production of electricity for sale to EDSA or such other authority as the Commission may permit unless the person holds a generation licence issued by the Commission;

(b) construct, install and operate the national transmission network for the transmission of electricity to areas in the country and undertake activities relating to the West African Pool unless the person holds a transmission licence issued by the Commission;

(c) construct, install and operate facilities for the distribution of electricity directly or indirectly to the consumers within a designated area unless the person holds a distribution licence issued by the Commission;

(d) generate electricity at a specified point of injection into the distribution network and sell it to a distribution licensee unless that person holds an embedded generation licence issued by the Commission;

(e) monitor and control the national electricity interconnected system or segment and dispatch electricity within the country unless the person holds a system operation licence issued by the Commission;

(f) procure electricity from generation licensee including imports for transmission to another entity or for sale to a consumer unless the person holds a trade licence issued by the Commission;

(g) procure electricity and use a distribution licen-

see's system to sell electricity to consumers in a designated area unless the persons holds a sale licence issued by the Commission.

**4.** A person shall not –

(a) harness and produce water by the construction of related works and transmission pipelines and supply water to a distribution licensee unless that person holds a production licence issued by the Commission;

(b) procure water in bulk from a production licensee for distribution and sale through its distribution system unless the person holds a distribution licence issued by the Commission.

**Requirement  
for water  
distribution  
licence**

**5.** (1) A person wishing to apply for a licence under these rules shall fill out the relevant form set out in Schedule 1A.

**Application for  
a licence**

(2) An application for a licence shall be accompanied with all the following supporting documents relevant to the licence applied for –

(a) the documents set out in Schedule 2AI in the case of an electricity generation licence;

(b) the documents set out in Schedule 2AII in the case of an electricity transmission licence;

(c) the documents set out in Schedule 2AIII in the case of a system operator licence;

(d) the documents set out in Schedule 2AIV in the case of an electricity distribution licence;

(e) the documents set out in Schedule 2BI in the case of a water production licence;

(f) the documents set out in Schedule 2BII in the case of a water distribution licence.

(3) Notwithstanding sub-rule (2) the supporting documents shall include where applicable a local content plan specifying how the licensee will promote the development and utilization of indigenous materials, goods and services.

(4) An application shall be signed and dated by the applicant or an authorized representative.

**6.** An applicant who wishes to undertake more than one activity under these rules shall apply for a multiple licence.

**Multiple  
licence**

**7.** The applicant shall submit the application with a non-refundable fee as determined by the Commission and published in the Gazette.

**Application  
fee**

**8.** The Commission shall within 10 days of receiving an application issue a letter acknowledging receipt of the application.

**Receipt of  
application**

**9.** Where the Commission requires additional information from the applicant it shall notify the applicant in writing setting out the additional information it requires and the period within which it should be submitted.

**Additional  
information**

**10.** (1) The Commission may cause a list of the applicants to be published in a newspaper of mass circulation.

**Publication of  
applicants**

(2) The publication shall indicate that a written objection or a representation in respect of the applicant may be made to the Commission within 21 days of the publication.

**11.** (1) Where the Commission decides that an objection or representation warrants a response the Commission shall notify the applicant of such objection instructing him to respond to the objection or representation within 10 days of receipt of the notice.

**Objections or  
representa-  
tion**

(2) The Commission shall take into consideration the objection and the response of the applicant in assessing an application.



**12.** (1) The Commission shall within 60 days from the date of the submission of the application make a decision and notify the applicant of its decision in writing. **Decision of the Commission**

(2) The 60 days shall be deemed to commence on the date the Commission received all the material information and documentation requested as part of the process for ensuring the completeness of the application.

**13.** Where the Commission grants a licence, it shall inform the licensee in writing of the grant setting out the licence terms and conditions. **Grant of licence**

**14.** (1) The Commission may refuse an application where – **Refusal of licence**

(a) the information attached to the application fails to meet the required criteria;

(b) the information submitted is false or misleading ;

(c) applicant fails to produce additional information within the specified time.

(2) Where none of the conditions under sub rule (1) exist, the Commission shall only refuse the grant of a licence based on reasons relating to the financial, technical and managerial capability of the applicant and the negative impact on the applicant's ability to render the service for which the licence is being sought.

(3) Where an application is refused the Commission shall notify the applicant of the refusal and the reasons thereof.

**15.** (1) An applicant who wishes to withdraw his application shall submit a written request to the Commission at any stage of the application. **Withdrawal of application**

(2) An application withdrawn shall not be reactivated but may be resubmitted as a new application upon payment of the prescribed fee.

**16.** (1) The applicant whose application for a licence was refused may appeal within 7 days of the receipt of the notification from the Commission about the refusal. **Appeal**

(2) The Commission shall consider any representations made and shall duly notify the applicant in writing of its decision within 7 days of receipt of the appeal.

**17.** (1) The Commission may modify a licence granted if the modification is permissible under the terms of the licensee or it is in the interest of the public. **Modification of licence**

(2) A licensee wishing to modify his licence may apply to the Commission for such modification.

(3) An application for modification of a licence shall be in a form as set out in Schedule 1B.

**18.** An applicant who is granted a licence shall pay the licence fees as determined by the Commission and published in the Gazette. **Licence fees**

**19.** A holder of a licence shall pay the annual fee as determined by the Commission and published in the Gazette. **Annual fees**

**20.** The duration of the various types of licences shall be as determined by the Commission and published in the Gazette. **Duration of a licence**

**21.** (1) A licensee shall not transfer the licence to another person unless he applies to the Commission for an authorisation of transfer. **Transfer of licence**

(2) The Commission shall publish the names of the transferor and proposed transferee in the Gazette and newspapers of mass circulation for a period of 15 days.

(3) The publication shall indicate that a written objection or a representation in respect of the transferor and transferee may be made to the Commission within 15 days of the publication.

(4) Where the Commission decides that an objection or representation warrants a response the Commission shall notify the transferor and transferee of such objection instructing them to respond to the objection or representation within 7 days of receipt of the notice.

(5) The Commission shall take into consideration the objection and the response of the applicant in assessing an application.

(6) In considering the transfer of licence application the Commission shall have the same considerations it applies in granting a new licence.

(7) The Commission shall within 30 days from the date of the submission of the application for transfer make a decision and notify the applicant of its decision in writing.

**22.** (1) A licensee shall not change its name or shareholding structure unless he makes an application to the Commission for the change. **Change of name, etc.**

(2) The Commission shall consult with the Corporate Affairs Commission, the National Revenue Authority and other relevant agencies before granting the approval.

(3) The Commission shall not unreasonably refuse to grant the approval.

(4) Within 15 days after the approved change in name or shareholding structure has been entered into the Register of Companies by the Corporate Affairs Commission, the applicant shall submit copies of the relevant certificates to the Commission to be entered in the Register of Licences.

**23.** (1) A licensee who wishes to renew his licence shall submit his renewal application to the Commission 3 months before the expiration of his licence. **Renewal of licence**

(2) The renewal application shall be as set out in Schedule 1C.

(3) The licensee shall pay the non-refundable renewal fee as to be determined by the Commission and published in the Gazette.

(4) Rules relating to application for a new licence shall apply to renewal of licence with the necessary modification.

(5) Where a licensee fails to renew its licence or the application for renewal is rejected by the Commission, such licensee shall cease to operate as a licensee.

**24.** (1) The Commission may suspend or cancel a licence if it satisfied that the licensee –

**Suspension or  
cancellation  
of licence**

(a) is in breach of a condition under the terms of its licence;

(b) has failed or refused to take remedial measures within the timeframe determined by the Commission;

(c) has become unfit to hold the licence as a result of –

(i) failure to meet a required licensing criteria;

(ii) submission of information that is false or misleading;

(iii) failure to produce material information within the specified time;

(iv) failure to comply with a directive or order of the Commission.

(2) The Commission shall before suspending or cancelling a licence give the licensee written notice of its intention and the reasons for the suspension or cancellation.

(3) The Commission shall in the notice referred to under

sub-rule (2) require the licensee to show cause in writing within seven (7) days of the receipt of the notice why the licence should not be suspended or cancelled.

(4) The Commission shall after considering the explanation of the licensee, inform the licensee in writing of its decision within 15 days of receiving the explanation.

(5) Where a licence is fails to remedy the defect that gave rise to the suspension or cancellation of his licence within a reasonable tie the Commission shall cancel the licence.

(6) Where a licence is not utilized within 1 year from the date of its grant, the Commission shall issue a notice of cancellation to the licensee indicating that the licence will be cancelled if the licensee fails to utilise the licence within 30 days from the date of issuance of the notice of cancellation.

(7) Where a licensee fails to comply with the cancellation notice referred to under sub-rule (6) the Commission shall cancel the licence.

**25.** (1) A person who is aggrieved by a decision of the Commission under these rules may apply in writing to the Commission for a review.

#### **Review**

(2) The review shall be conducted by the Review Committee established under paragraph (a) of sub-section (2) of section 21 of the Act.

**26.** (1) Where there are competing applications the Commission may in consultation with the Ministers responsible for energy, finance and water resources select the licensee for that specific licence through a competitive bidding process in accordance with this rule.

#### **Selection of licensee by a bidding process**

(2) The Commission shall publish the requirements of the bid in the Gazette and shall include the following –

(a) the details of the criteria and schedule for awarding of the licence;

(b) the manner of submission of application by bidders;

(c) additional information required for considering the application; and

(d) criteria for assessment of bid documents submitted.

(3) The bids shall be evaluated by a committee established by the Commission which shall include –

(a) in the case of an electricity sector project a representative each of the following ministry, department or agency –

(i) ministry responsible for finance;

(ii) ministry responsible for energy;

(iii) Electricity Distribution and Supply Authority (EDSA); and

(iv) Electricity Generation and Transmission Company (EGTC).

(b) in the case of a water sector project a representative each of the following ministry, department or agency –

(i) ministry responsible for finance;

(ii) ministry responsible for water resources;

(iii) National Water Resources Management Agency (NWRMA);

(iv) Guma Valley Water Company (GVWC); and

(v) Sierra Leone Water Company (SALWACO).

**27.** (1) A licensee shall where applicable –

**Compliance**

(a) provide a service that is safe, adequate, efficient, reasonable and non-discriminatory;

(b) carry out works relating to the licence activity including engineering, construction, commissioning, repairs, rehabilitation, operation and maintenance in accordance with the law, applicable standards and prudent utility practice;

(c) ensure that the charges, rates and tariffs obtained in respect of the licenced activity shall be subject to approval by the Commission;

(d) ensure that in undertaking the licenced activity, it achieves a year on year improvements in respect of the socio-economic and commercial benchmarks prescribed by the Commission, including those prescribed during tariff reviews.

**28.** (1) Where applicable a licensee shall comply with any direction by the Commission to permit the joint use of their equipment and facilities after the Commission is satisfied upon the conclusion of an investigation that a joint use of equipment and facilities –

**Joint use of facilities**

(a) is necessary to provide safe, adequate and economic service to consumers;

(b) will not result in damage to the owners or users of the equipment and facilities; and

(c) is just and reasonable.

(2) Where sub-rule (1) is applicable the licensees shall enter into an agreement for joint use of facilities or other arrangement upon such terms as the Commission may determine.

### **PART III – LICENCES RELATING TO ELECTRICITY**

**29.** (1) A generation licensee shall –

**Conditions of  
an electricity  
generation  
licence**

(a) provide electricity of a quality suitable for the transmission grid or distribution network stated in the licence;

(b) comply with the technical conditions of connection to the transmission grid or supply network stated in the licence or prescribed under the law and the conditions stated in the licence;

(c) properly take into account the environmental effects of its activities under the licence.

(2) The generation licensee shall be obligated to –

(a) generate electricity for the interconnected system in accordance with instructions from the transmission or distribution and sale licensee, as the case may be;

(b) maintain and operate the generation plant in order to ensure efficiency, reliability, public and workers' safety;

(c) provide ancillary services requested by the transmission or distribution and sale licensee that are necessary for the reliable and secure operation of the interconnected system;

(d) comply with the relevant provisions of the grid code and performance codes issued by the Commission;

(e) propose tariffs for the approval of the Commission for the supply of wholesale electricity and ancillary services supplied to the transmission or distribution system, as the case may be, in accordance with the law relating to tariff; and



(f) achieve the targets contained in the Commission's standard of performance rules.

**30.** (1) A transmission licensee shall as far as technically and economically practicable allow other licensees to connect and supply electricity to the transmission grid stated in the licence or take electricity from the grid on fair and reasonable terms if the conditions state in sub-rule (2) are satisfied.

**Conditions of  
transmission  
licence**

(2) The conditions to be satisfied pursuant to sub-rule (1) shall be as follows:

(a) the licensee shall be authorized under the rules to connect supply or take electricity from the transmission grid;

(b) the grid shall be capable of being used safely to connect supply or take electricity as proposed by the licensee;

(c) the licensee shall, in addition to compliance with all the law shall also comply with operational and procedural matters relevant to connecting supply to, or taking electricity from, the grid;

(d) the licensee shall pay the reasonable cost for connection to the grid.

(3) In deciding whether the conditions stated under paragraph (b) of sub-rule (2) have been satisfied, all relevant matters shall be considered including but not limited to the following –

(a) the transmission licensee's current obligations;

(b) the current obligations of the persons connected directly or indirectly to the transmission grid;  
and

(c) the grid's capacity.

(4) A transmission licensee shall operate, maintain, repair and protect its transmission grid to ensure the adequate, economic, reliable and safe transmission of electricity.

(5) A transmission licensee shall ensure, as far as technically and economically practicable, that the transmission grid is operated with enough capacity to provide network services to persons authorized to connect to the grid or take electricity from the grid.

(6) A transmission licensee shall provide, as far as technically and economically practicable, network services on fair and reasonable terms, for licensees authorized to connect supply of electricity to the transmission grid or take electricity from the grid.

(7) A transmission licensee shall comply with all standards, conditions and laws applicable to the licensee.

(8) A transmission licensee which is empowered to be the operator of the national grid shall operate the national grid, in coordination with, where appropriate, regional transmission grids to which it is connected directly or indirectly.

(9) A transmission licensee shall be responsible for national and regional system control of the transmission grid.

(10) A transmission licensee shall be responsible for forecasting demand in a prudent manner so as to establish the national and system requirements and ensure the current and future demand requirements relating to generation and transmission capacity are met through short, medium and long term forecasts and plans.

**31.** (1) A distribution licensee shall operate, maintain, including repair and replace as necessary and protect its supply network to ensure the adequate, economic, reliable and safe connection and supply of electricity to its consumers.

**Electricity  
distribution  
licence**

(2) A distribution licensee shall consider both demand side

and supply side options to provide, as far as technically and economically practicable, efficient supply of electrical energy.

(3) A distribution licensee shall allow, as far as technically and economically practicable for an embedded generation licensee to connect supply to its supply network, on fair and reasonable terms, if the conditions provided under sub-rule (4) are satisfied.

(4) The conditions to be satisfied under sub-rule (3) shall be that:

(a) the person shall be a generation licensee, a transmission licensee, or a distribution licensee;

(b) the distribution network shall be capable of being safely used to connect supply or take electricity as provided by the licensee seeking to connect;

(c) the licensee shall comply with all provisions of the Rules relevant to connecting supply to, or taking electricity from, the network;

(d) the person shall pay a reasonable cost for connection to the network.

(5) In deciding whether the condition stated under paragraph (b) of sub-rule (4) has been satisfied, all relevant matters shall be considered, including but not limited to –

(a) the distribution licensee's current obligations and its expected future obligations;

(b) the current obligations of other persons connected directly or indirectly to the distribution network; and

(c) the distribution network's capacity.

(6) A distribution licensee shall provide, as far as technically and economically practicable, network services, on fair and

reasonable terms for persons authorized to connect supply of electricity to the network or take electricity from the network.

(7) A distribution licensee shall ensure the fair, transparent and non-discriminatory operation, dispatch and control of its network.

(8) A distribution licensee shall be responsible for forecasting demand in a prudent manner so as to establish the system requirements and ensure the current and future demand requirements relating to supply capacity in its distribution area are met through short, medium and long term forecasts and plans.

(9) A distribution licensee shall establish and abide by consumer complaints procedures for handling consumer complaints after they have been approved by the Commission.

(10) A distribution licensee shall establish and abide by a consumer charter which contains the level of service consumers are to expect from the licensee after it has been approved by the Commission.

**32.** (1) An embedded generation licensee shall apply to the distribution licensee responsible for service in its location for a connection and undergo the processes necessary for obtaining a connection which include the related system impact study, design of connection, connection and commissioning of facilities.

**Embedded  
generation  
licence**

(2) An embedded generation licensee shall –

(a) execute the connection agreement with the distribution utility and pay the related charges;

(b) generate and feed power to the connection point in accordance with the instructions of the distribution licensee, the terms of the connection agreement as well as the Distribution Code;

(c) be paid a tariff that is approved by the Commission in accordance with the electricity tariff

laws.

**33.** (1) A system operation licensee shall ensure that it undertakes fairly, transparently, efficiently, economically and in a non-discriminatory manner the operation of and control of the transmission system.

**System  
operation  
licence**

(2) Without limiting the effect of sub-rule (1), the system operation licensee shall undertake the following –

- (a) generation and transmission system planning;
- (b) generation scheduling and dispatch of electricity;
- (c) procurement and administration of ancillary services;
- (d) international transmission coordination;
- (e) administration of the wholesale electricity market, including market settlement.

(3) A system operator licensee shall perform the market operation function of the electricity supply industry.

(4) A system operation licensee shall establish and implement a system operation as well as market operation rules for the approval of the Commission in order to perform its system operation, dispatch and market operations functions effectively.

(5) Charges to system operation and market operations shall be subject to approval by the Commission.

**34.** (1) The Commission shall establish a committee to oversee the system operation and the market operation functions of the system operations licensee.

**Commission  
oversight**

(2) The qualifications and criteria for members of the Committee as well as their responsibilities shall be communicated by the Commission and published in the Gazette.

**35.** (1) An electricity trade licensee shall –

**Electricity  
trade**

(a) have a power purchase agreement with its supplier;

(b) conclude a network services agreement with the transmission licensee where applicable.

(2) An electricity trade licensee which does not own or operate a transmission network shall have a fixed place of business to engage in the bulk electricity trade or import and export activity.

(3) Tariffs for the supply of electricity by a trader to a distribution licensee shall be subject to approval by the Commission.

**36.** (1) An electricity sale licensee shall purchase and sell electricity utilizing a distribution network to consumers in a fair, transparent and non-discriminatory manner in a zone or area delineated in its licence.

**Electricity  
sale licence**

(2) Without limiting the effect of sub rule (1), the electricity sale licensee shall in the course of its business comply with the relevant provisions of the consumer service as stated in the Act or statutory instruments made under the Act relating to the following activities –

(a) metering and meter reading;

(b) billing and collection;

(3) The electricity sale licensee shall establish procedures for settling consumer complaints which shall be approved by the Commission.

#### **PART IV – LICENCES RELATING TO WATER**

**37.** (1) A water production licensee shall obtain a water use permit from the National Water Resources Agency and produce water for supply to a water distribution licensee –

**Water  
production  
licence**

(a) in sufficient quantities to meet demand; and

(b) in accordance with the water quality standards established by the Commission and the Sierra Leone Standards Bureau.

(2) A licensee shall undertake demand forecast and planning for the short, medium and long term to estimate as accurately as possible the quantity of water required for distribution to consumers in its service area and how to meet the estimated demand.

(3) A licensee shall undertake the construction, repairs, and operation and maintenance of such facilities for meeting the consumer demand.

(4) A licensee shall observe prudent conservation and water management measures to ensure sustainable and optimal utilization of the water resource.

(5) The charges for the licensee's services shall be subject to approval by the Commission.

(6) The licensee shall submit quarterly reports to the Commission.

**38.** (1) A water distribution licensee shall operate, maintain, repair and replace and protect its supply network to ensure the adequate, economic, reliable and safe supply to its customers.

**Water  
distribution  
licence**

(2) A licensee shall consider conservation measures and supply side options to provide, as far as technically and economically practicable, efficient supply of water.

(3) A licensee shall ensure the fair, transparent and non-discriminatory operation and provision of water services to every consumer within its distribution area.

(4) A licensee shall forecast consumer demand and growth as accurately as possible within its distribution area and de-

velop plans for meeting the demand.

(5) A licensee shall establish –

(a) a consumer charter which specifies the level of service the consumers are to expect; and

(b) dispute resolution procedures for resolving consumer complaints which shall be subject to the approval procedures specified in the Act or statutory instrument made under the Act.

(6) A licensee shall ensure that water supplied through its distribution system to consumers meets the minimum quality standards, reliability requirements and continuity of supply targets prescribed by the Commission.

(7) The tariff for the licensee’s services shall be subject to approval by the Commission.

#### **PART V – MISCELLANEOUS PROVISIONS**

**39.** (1) A licensee shall ensure that every service, material or equipment that it does not produce itself is procured by an efficient and competitive procurement process which ensures value for money and utilization of qualified contractors, consultants, experts, material, goods, works and services. **Procurement by licensee**

(2) As far as is practicable, where the nature of the purchase permits procurement it shall be by a transparent tender process.

**40.** (1) A licensee shall indicate on documents submitted to the Commission information that it considers commercially sensitive by writing or stamping the word “confidential” in a large font and conspicuous manner. **Confidentiality**

(2) Subject to sub-regulation (3), the Commission, its staff and consultants shall treat any such information as confidential and shall not reveal it to third parties.



(3) Sub-regulation (2) shall not apply to the document if the Commission rules against the confidentiality of such information.

**41.** The holder of more than one licence or a licensee who engages in another business shall maintain separate accounts respectively for each operation. **Accounts separation**

**42.** The holder of multiple licences granted by the Commission or a licensee who engages in another business shall not cross subsidise licenced activities undertaken under the other licence or other business activity. **Prohibition of cross – subsidies**

**43.** (1) A licensee shall comply with the environmental requirements prescribed for the sector by the Environmental Protection Agency. **Environmental requirements**

(2) Without limiting the effect of sub-rule (1) an application for a licence shall in addition to the requirement for economic, social and cultural elements also contain a gender assessment of the project.

**44.** The decommissioning section of the applicant’s environmental impact assessment shall include a decommissioning plan in a form that is acceptable to the Commission. **Decommissioning**

**45.** Each licensee shall comply with the national health and safety laws and requirements and shall take reasonable steps in protecting persons and property from injury and damage that may occur as a result of the carrying out the licenced activity. **Health and safety**

**46.** (1) A licensee shall keep its accounts in accordance with the Act, statutory instruments made under the Act and other regulatory accounting guidelines as may be issued by the Commission from time to time. **Financial reporting**

(2) Where requested by the Commission, the licensee shall provide such accounts to the Commission as are necessary for the Commission to carry out its functions under the Act consistent with applicable laws, financial regulations and best accounting standards.

(3) Where appropriate, the licensee shall keep consolidated accounts for other, non-licenced activities, so that the revenues, costs, assets, liabilities, reserves and provisions of, or reasonably attributable to, the licenced business are separately identifiable in the books of the licensee and any affiliate of the licensee from those of its other businesses.

**47.** The licensee shall notify the Commission as soon as possible and at most within 2 business days of any major incident affecting any part of the licensee's activity in accordance with rules relating to performance standard, technical and operational codes and other rules and procedures specified by the Commission.

**Incident  
reporting**

# SCHEDULE 1

## APPLICATION FORMS

Please indicate the type of Application form being submitted below:

Application Form for Licence (Schedule 1A)	ELECTRICITY	GENERATION
		TRANSMISSION
		DISTRIBUTION
		EMBEDDED GENERATION
		SYSTEM OPERATION
		SALE
	WATER	PRODUCTION
		TRANSMISSION
		DISTRIBUTION
Application Form for Modification of Licence (Schedule 1B)	ELECTRICITY	GENERATION
		TRANSMISSION
		DISTRIBUTION
		EMBEDDED GENERATION
		SYSTEM OPERATION
		SALE
	WATER	PRODUCTION
		TRANSMISSION
		DISTRIBUTION
Application Form for Renewal of Licence (Schedule 1C)	ELECTRICITY	GENERATION
		TRANSMISSION
		DISTRIBUTION
		EMBEDDED GENERATION
		SYSTEM OPERATION
		SALE
	WATER	PRODUCTION
		TRANSMISSION
		DISTRIBUTION

**SCHEDULE 1A**  
**APPLICATION FOR LICENCE**

**Rule 5(1)**

IMPORTANT NOTE: An application is incomplete unless all requirements herein are received  
and all questions are answered

1.0 PARTICULARS OF APPLICANT

1.1 Applicant Information

Full Name:

\_\_\_\_\_

Physical address:

\_\_\_\_\_

Postal address:

\_\_\_\_\_

Tel:

\_\_\_\_\_

Fax:

\_\_\_\_\_

Mobile Phone:

\_\_\_\_\_

E- mail:

\_\_\_\_\_

2.0 LEGAL STATUS OF APPLICANT

2.1 Applicant should indicate legal status by ticking against one of the listed

- Individual                                       Sole proprietorship                                       Partnership
- Public Limited Liability Company     Private Limited Liability Company     Cooperative Society
- Other (please specify): \_\_\_\_\_

*(Attach Certificate of Registration, Certificate of Incorporation, Memorandum and Articles of Association as applicable)*

2.2 List and Particulars of Directors:

Full Name	Address	Nationality

3.0 NATURE OF LICENCE

3.1 Indicate the type of licence required:

ELECTRICITY	GENERATION	
	TRANSMISSION	
	DISTRIBUTION	
	EMBEDDED GENERATION	
	SYSTEM OPERATION	
	SALE	
WATER	PRODUCTION	
	DISTRIBUTION	

3.2 State whether applicant has an existing licence issued by the Commission:

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3.3 Has the applicant ever been denied a licence or had its licence suspended or revoked by the Commission?

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3.4 If yes, state the case number

---

#### 4.0 MAIN BUSINESS ACTIVITIES OF APPLICANT

Indicate the current main business activity(ies) of applicant.

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*(Please attach Tax Clearance Certificate for the past three (3) years if applicable)*

#### 5.0 TECHNICAL CAPACITY

Please provide detailed statement of applicant's technical competence to undertake the proposed services. *(Attach CVs of key technical personnel)*

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#### 6.0 REQUIRED ATTACHMENTS

Provide copies of all required documents and information as listed in the relevant Schedule:

- i. Electricity – Schedule 2A
- ii. For Electricity Generation Licence, see Schedule 2A-I – Requirements for Application for an Electricity Generation Licence
- iii. For Electricity Transmission Licence, see Schedule 2A-II – Requirements for Application for an Electricity Transmission Licence
- iv. For Electricity System Operator Licence, see Schedule 2A-III – Requirements for Application for System Operator Licence
- v. For Electricity Distribution Licence, see Schedule 2A-IV – Requirements for Application for Electricity Distribution Licence
- vi. For Electricity Embedded Generation Licence, see Schedule 2A-V
- vii. For Electricity Sale Licence refer to Schedule 2A-VI
- viii. Water – Schedule 2B
- ix. For Water Production Licence, see Schedule 2B-I – Requirements for Application for Water Licence
- x. For Water Distribution Licence, see Schedule 2B-II

7.0 DECLARATION BY THE APPLICANT:

I/we hereby declare that the details stated above are, to the best of my/our knowledge, true and correct.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_

Has hereunto been affixed in the presence of:

Name: \_\_\_\_\_ Sign: \_\_\_\_\_

APPLICANT AND POSITION IF A CORPORATE PERSON

Sworn to this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ at \_\_\_\_\_

BEFORE ME

\_\_\_\_\_

NOTARY PUBLIC/COMMISSIONER OF OATHS

=====

FOR OFFICIAL USE ONLY

1. Date of submission of application: \_\_\_\_\_

2. Fees Paid and Receipt Number: \_\_\_\_\_

\_\_\_\_\_

3. Results of Verification for completeness:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Recommendation of EWRC Legal Division:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Recommendation of EWRC Engineering, Standards and Safety:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Decision of EWRC: \_\_\_\_\_

\_\_\_\_\_

7. Issue date and expiration date of Licence: \_\_\_\_\_

8. Effective date of amendment: \_\_\_\_\_

9. Other Relevant information:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**SCHEDULE 1B**  
**APPLICATION FOR MODIFICATION OF LICENCE**

**Rule 17(3)**

IMPORTANT NOTE: An application is incomplete unless all requirements herein are received and all questions are answered

1.0 PARTICULARS OF APPLICANT

1.1 Applicant Information

Full Name:

Physical address:

Postal address:

Tel:

Fax:

Mobile Phone:

E- mail:

Website Address:

1.2 Contact Person Information

Full Name:

Physical address:

Postal address:

Tel:

Fax:

Mobile Phone:

E- mail:

2.0 TYPE OF EXISTING LICENCE

Indicate the type of existing licence:

ELECTRICITY	GENERATION	
	TRANSMISSION	
	DISTRIBUTION	
	EMBEDDED GENERATION	
	SYSTEM OPERATION	
	SALE	
WATER	PRODUCTION	
	DISTRIBUTION	

2.1 Current Licence:

(a) Licence Number: \_\_\_\_\_

Expiration date of the licence: \_\_\_\_\_

Has the applicant ever been denied a licence or had its licence suspended or revoked by the Commission?

\_\_\_\_\_

If yes, state the case number: \_\_\_\_\_

2.2 Previous Application(s)

Have you applied previously for a renewal of your licence?

\_\_\_\_\_

Has the applicant ever been refused an Application to renew the licence?

\_\_\_\_\_

If yes, state the case number

\_\_\_\_\_

2.3 Term of Proposed Renewal

\_\_\_\_\_

3.0 DECLARATION BY THE APPLICANT:

I/we hereby declare that the details stated above are, to the best of my/our knowledge, true and correct.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

Has hereunto been affixed in the presence of:

Name: \_\_\_\_\_ Sign: \_\_\_\_\_

POSITION if corporate person

Sworn to this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ at \_\_\_\_\_

BEFORE ME

\_\_\_\_\_

NOTARY PUBLIC / COMMISSIONER OF OATHS

=====

FOR OFFICIAL USE ONLY FOR OFFICIAL USE ONLY

1. Date of submission of application: \_\_\_\_\_

2. Fees Paid and Receipt Number: \_\_\_\_\_

\_\_\_\_\_

3. Results of Verification for completeness:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Recommendation of EWRC Legal Division:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Recommendation of EWRC Engineering, Standards and Safety:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Decision of EWRC: \_\_\_\_\_

\_\_\_\_\_

7. Issue date and expiration date of Licence: \_\_\_\_\_

8. Effective date of amendment: \_\_\_\_\_

9. Other Relevant information:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SCHEDULE 1C**  
**APPLICATION FOR RENEWAL OF LICENCE**

**Rule 23(2)**

IMPORTANT NOTE: An application is incomplete unless all requirements herein are received and all questions are answered

1.0 PARTICULARS OF APPLICANT

1.1 Applicant Information

Full Name:

Physical address:

Postal address:

Tel:

Fax:

Mobile Phone:

E- mail:

Website Address:

1.2 Contact Person Information

Full Name:

Physical address:

Postal address:

Tel:

Fax:

Mobile Phone:

E- mail:

2.0 TYPE OF EXISTING LICENCE

Indicate the type of existing licence:

ELECTRICITY	GENERATION	
	TRANSMISSION	
	DISTRIBUTION	
	EMBEDDED GENERATION	
	SYSTEM OPERATION	
	SALE	
WATER	PRODUCTION	
	DISTRIBUTION	

2.1 Current Licence:

(a) Licence Number: \_\_\_\_\_

Expiration date of the licence: \_\_\_\_\_

Has the applicant ever been denied a licence or had its licence suspended or revoked by the Commission?

\_\_\_\_\_

If yes, state the case number: \_\_\_\_\_

2.2 Previous Application(s)

Have you applied previously for a renewal of your licence?

\_\_\_\_\_

Has the applicant ever been refused an Application to renew the licence?

\_\_\_\_\_

If yes, state the case number

\_\_\_\_\_

2.3 Term of Proposed Renewal

\_\_\_\_\_

3.0 DECLARATION BY THE APPLICANT:

I/we hereby declare that the details stated above are, to the best of my/our knowledge, true and correct.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

Has hereunto been affixed in the presence of:

Name: \_\_\_\_\_ Sign: \_\_\_\_\_

POSITION if corporate person

Sworn to this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ at \_\_\_\_\_

BEFORE ME

\_\_\_\_\_

NOTARY PUBLIC / COMMISSIONER OF OATHS

=====

FOR OFFICIAL USE ONLY FOR OFFICIAL USE ONLY

1. Date of submission of application: \_\_\_\_\_

2. Fees Paid and Receipt Number: \_\_\_\_\_  
\_\_\_\_\_

3. Results of Verification for completeness:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Recommendation of EWRC Legal Division:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Recommendation of EWRC Engineering, Standards and Safety:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Decision of EWRC: \_\_\_\_\_  
\_\_\_\_\_

7. Issue date and expiration date of Licence: \_\_\_\_\_

8. Effective date of amendment: \_\_\_\_\_

9. Other Relevant information:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**SCHEDULE 2A-I**  
**REQUIREMENTS FOR APPLICATION FOR ELECTRICITY**  
**GENERATION LICENCE**

**Rule 5(2)(a)**

**1. Mandatory Submissions:**

- (1) Completed Application Form.
- (2) Certificate of Incorporation and Certificate of Business Registration and Memorandum and Articles of Association, or Deed of Partnership.
- (3) Evidence of lease or other acquisition of land (if applicable).
- (4) Tax Clearance Certificate for immediate past three (3) years (if applicable).
- (5) Business Plan (for the term of the licence).
- (6) Off-take Agreement or Arrangement.
- (7) Environmental Impact Assessment (EIA) Approval Certificate, or Proof of submission and acceptance for processing of the Report on EIA to the Environmental Protection Agency (EPA), including details on how effluents and discharges will be managed.
- (8) For new (greenfield) facilities:
  - a. MoU with or Letter of Intent from Engineering Procurement Contract (EPC) Contractor (if applicable).
  - b. MoU with or Letter of Intent from the technical partner (if applicable).
  - c. Financing Agreements or letter of intent to fund the project from financial institution(s).
  - d. Timelines for commissioning of the plant and the date when different capacities of the plant will come into operation.
  - e. Feasibility study with economic and financial analysis and social impact assessment.

**2. General Requirements:**

- (1) Site Map showing fuel delivery and storage locations; transmission evacuation site; water pipelines; gaseous, liquid, and solid waste disposal areas; etc.
- (2) Location Map showing Roads, Rail Lines, Transmission Lines, Rivers, Reservoirs, etc.
- (3) A principal single-line diagram of the project site.
- (4) Fuel Sourcing, Transportation, and Supply Arrangements.

- (5) Water supply and availability analysis for plant and staff use.
- (6) Plant Design.
- (7) Number of staff.
- (8) Power Station Information:
  - a. Total capacity (MW)
  - b. Number of Generating Units
  - c. Size of Generating Units (MW)
  - d. Expected Annual Generation (MWh)
  - e. Proposed Running Regime
  - f. Station Load/Load Factor
- (9) Generator Unit Information (this information must be reported for each facility intended to be covered by the licence):
  - a. Generator Type
  - b. Rating (MVA, MW)
  - c. Terminal Voltage (KV)
  - d. Rated Frequency
  - e. Rated speed (RPM)
  - f. Automatic Frequency Control Facility
  - g. Rated Power Factor
  - h. Unit Efficiency
  - i. Short Circuit Ratio
  - j. Direct Axis Transient Reactance
  - k. Direct Axis Sub-transient Reactance
  - l. Quadrature Axis transient reactance
  - m. Generator Cooling (Air-cooled, Hydrogen, etc.)
  - n. Auxiliary Power Requirements
  - o. Type of Exciter (Static or Rotating, Self or Separately Excited)
  - p. AVR type
  - q. Generation Protection (Relays)
  - r. Type and Characteristics of Governor Control System
  - s. Generator Unit Transformer Data
  - t. Manufacturer's name / Year of Manufacture / Warranty
- (10) For new facilities, EPC Contract.

- (11) Details of Phasing of Project, if applicable.
- (12) Auxiliary Systems.
- (13) Ancillary Services:
  - a. Black Start facilities
  - b. Reactive Power Generation capabilities
  - c. Frequency Response Capability
  - d. Maximum Generation capability
  - e. Fast Start capability
- (14) Report of evacuation studies:
  - a. Load Flow Studies
  - b. Stability Studies
  - c. Short Circuit Studies
- (15) Station Safety Arrangements:
  - a. Emergency Response Plan
  - b. Fire Fighting Facilities
  - c. First Aid
  - d. Safety Awareness and Staff Training Plans
  - e. Personal Protective Equipment (PPE)
  - f. Health & Safety Policy
- (16) EIA and Waste Management Plan.
- (17) Expected date of Commissioning.
- (18) Evidence of approval from Transmission Company confirming that proposed connection point has capacity to take load which will be fed to its Connection.

### **3. Specific Requirements:**

#### **(1) For Hydro Plants:**

- a. Agreement/Approval with Ministry of Energy and the National Water Resources Management Agency.
- b. Map showing proposed Dam Reservoir Area, Water conductor system, fore bay, power house, etc.
- c. Information on area of village, forestland, agricultural land, etc., submerged.
- d. Turbine Unit Information (Hydro Turbines):

- (a) Turbine Type
- (b) Nominal Head (Meters)
- (c) Nominal Water Flow (m<sup>3</sup>/s)
- (d) Turbine Capacity (MW)
- (e) Turbine Efficiency
- (f) Hydro Governor Type
- (g) Block diagram for the speed governor
- (h) Noise Level
- (i) Manufacturer's name / Year of Manufacture / Warranty

**(2) For Thermal Plants:**

a. Gas-Steam Plants:

- (a) Steam Turbine Type
- (b) Boiler Pressure and Temperature
- (c) Minimum and Maximum Rated Capacity
- (d) Steam Pressure and Temperature (Super Heat and Reheat)
- (e) Heat Rates
- (f) Efficiency at rated capacity
- (g) Fuel quality specifications requirements
- (h) Noise Level
- (i) Run-up and Run-down Rates
- (j) Minimum Synchronizing Generation
- (k) Manufacturer's name / Year of Manufacture / Warranty

b. Coal-Steam Plants:

- (a) Steam Turbine Type
- (b) Boiler Pressure and Temperature
- (c) Turbine Efficiency
- (d) Heat Rate
- (e) Noise Level
- (f) Run-up and Run-down Rates
- (g) Coal Type and source
- (h) Burner Type
- (i) Description of Coal Handling System (e.g., Mill type, Conveyor)

- (j) Coal Ash Management and Disposal Arrangement
  - (k) Emissions Levels (NO<sub>x</sub>, SO<sub>x</sub>, etc.)
  - (l) Flue Gas De-sulfurization System (if available)
  - (m) Manufacturer / Year of Manufacture / Warranty
- c. Gas Plants (OCGT):
- (a) Gas Turbine Type
  - (b) Minimum & Maximum Turbine Capacity
  - (c) Efficiency
  - (d) Fuel Quality Specifications
  - (e) Gas turbine pressure ratio
  - (f) Noise Level
  - (g) Heat Rate
  - (h) Run-up and Run-down Rates
  - (i) Ignition system
  - (j) Major Gas Turbine Accessories
  - (k) Type of Air Intake System
  - (l) Emission Levels
  - (m) Manufacturer / Year of Manufacture / Warranty
- d. Oil Plants:
- (a) Turbine Type
  - (b) Turbine Efficiency
  - (c) Heat Rate
  - (d) Noise Level
  - (e) Run-up and Run-down Rates
  - (f) Oil Type and source
  - (g) Burner and Ignition System Type
  - (h) Description of Oil Handling System (Storage and Heating facilities)
  - (i) Emission Levels
  - (j) Manufacturer / Year of Manufacture / Warranty

**(3) For Solar Plants:**

- a. Solar Thermal Power Generation:
  - (a) Type of Solar Thermal Power Generation technology employed

- (b) Terminal Voltage
  - (c) Station Load and Station Load Factor
  - (d) Ancillary Services provided
  - (e) Annual Generation
  - (f) Rated Power Factor
  - (g) Heat Rate
  - (h) Phases of project
  - (i) Total capacity of Plant
  - (j) Detailed Diagram of plant arrangements on site
  - (k) Turbine type and its accessories
  - (l) Boiler type and its accessories
  - (m) Collectors type and its accessories
  - (n) Cooling system for the steam condensers
  - (o) Collector isolation
  - (p) Solar resource assessment
- b. Solar Photovoltaic Cells Technology:
- (a) Maximum Cell Voltage
  - (b) Type of Solar Cell employed
  - (c) Maximum generation from photovoltaic (PV) Cells
  - (d) Type of Solar Panels and Inverters
  - (e) Capacity of Solar Panels and Inverters
  - (f) Building Penetrations / Water Damages
  - (g) Batteries Capacity
  - (h) Solar resource assessment

**(4) For Wind Farm:**

- a. Wind Speed (high-speed wind site or low-speed wind site)
- b. Wind farm information:
  - (a) Total capacity (MW)
  - (b) Number of Blades
  - (c) Rated Capacity (MW)
  - (d) Rotor Diameter (m)
  - (e) Rotor Speed (RPM)

- (f) Power Factor
  - (g) Rated Wind (m/s)
  - (h) Station Load
  - (i) Frequency
  - (j) Cut-in Wind Speed (m/s) and Cut-out Wind Speed (m/s)
  - (k) Swept Area (m<sup>2</sup>)
  - (l) Wind resource assessment
- c. Design Data (Wind Turbine):
- (a) Generator Type
  - (b) Gearbox Type
  - (c) Converter Type
  - (d) Braking System Type
  - (e) Yaw System Type
  - (f) Control System
  - (g) Offshore Container Type
  - (h) Onshore version (optional)
  - (i) Light Protection System
  - (j) Integrated Hoisting System)
  - (k) Hoisting System
- d. Noise Reduction:
- (a) Sound reduced gearbox
  - (b) Noise Emissions (in decibels)
  - (c) Noised reduced nacelle
  - (d) Noise insulation of generator
  - (e) Impact noise insulation of the gearbox
  - (f) Rotor Blade with minimal noise
  - (g) Noise reduced operation
- e. Tower Design Data:
- (a) Tower Type
  - (b) Hub height of the Tower (site dependent)
  - (c) Power Control
  - (d) Number of Towers

**(5) For Embedded Generation / Off-Grid Generation:**

- a. Total Capacity per site
- b. Number of Generating Units per site
- c. Fuel Type
- d. Size of Generating Units (MW & MVA)
- e. Terminal Voltage
- f. Rated Power Factor
- g. Reactive Power Capacity (if any)
- h. Noise Level
- i. System Protection
- j. Waste management plan or EIA (if required)
- k. Agreement or Arrangement with Distribution Company for Network use
- l. Manufacturer / Year of Manufacture / Warranty



**SCHEDULE 2A-II**  
**REQUIREMENTS FOR APPLICATION FOR ELECTRICITY**  
**TRANSMISSION LICENCE**

**Rule 5(2)(b)**

- (1) Completed Application Form.
- (2) Certificate of Incorporation and Certificate of Business Registration and Memorandum and Articles of Association, or Deed of Partnership.
- (3) Evidence of lease or other acquisition of land (as applicable).
- (4) Tax Clearance Certificate for immediate past three (3) years (if applicable).
- (5) Business Plan.
- (6) Asset register.
- (7) Financial statements (profit & loss, cash flow statement, and balance sheet) for previous three (3) years.
- (8) Off-take Agreement or Arrangement.
- (9) For new (greenfield) facilities:
  - a. MoU with or Letter of Intent from Engineering Procurement Contract (EPC) Contractor (if applicable).
  - b. MoU with or letter of intent from the technical partner (if applicable).
  - c. Financing Agreements or letter to fund the project from financial institution(s).
  - d. Feasibility study, including economic and financial analysis and social impact assessment for new transmission lines.
  - e. Environmental Impact Assessment (EIA) for new transmission Lines.
- (10) Network Agreements with Distribution or Trading Licensee.
- (11) Single-line diagram of the entire Transmission Networks (above 33 kV).
- (12) Single-line diagram of the transmission networks showing points of connections to major loads/power stations.
- (13) Number, Names, Capacities and Locations (GPS coordinates) of Transmission Sub-stations.
- (14) Number and Lengths of Transmission Lines.
- (15) Interconnecting Transformers (Number, types, capacities).
- (16) Monthly or (if monthly are not available) seasonal forecasts of the demand for electricity in the area of supply, disaggregated by customer category.

- (17) Estimates of number of customers, by customer category.
- (18) Estimates of technical and non-technical losses.
- (19) Reactive compensation equipment (details of compensators installed).
- (20) Sub-stations layouts diagrams showing:
  - a. Bus layouts.
  - b. Electrical Circuitry, lines, cables, transformers, switchgears, etc.
  - c. Earthing arrangements.
  - d. Switching facilities and interlocking arrangements.
  - e. Numbering nomenclature of transformers, circuits, circuit breakers, and isolating switches.
- (21) Transmission Lines Parameters:
  - a. Designation of transmission lines
  - b. Route Length of transmission lines
  - c. Number of Circuits
  - d. Per Circuit Values:
    - (a) Operating Voltage(s)
    - (b) Positive phase sequence reactance—ohms/km
    - (c) Positive phase sequence resistance—ohms/km
    - (d) Positive phase sequence susceptance—ohms/km
    - (e) Negative phase sequence reactance—ohms/km
    - (f) Negative phase sequence resistance—ohms/km
    - (g) Negative phase sequence susceptance—ohms/km
    - (h) Zero phase sequence reactance—ohms/km
    - (i) Zero phase sequence resistance—ohms/km
    - (j) Zero phase sequence susceptance—ohms/km
    - (k) Thermal Rating
- (22) Transformer Parameters (for all transformers):
  - a. Rated MVA
  - b. Voltage Ratio
  - c. Vector Group
  - d. Positive sequence reactance on rated MVA base (Max., Min., & Normal)
  - e. Positive sequence resistance on rated MVA base (Max., Min., & Normal)

- f. Zero sequence reactance on rated MVA base
  - g. Tap change range (+% to -%) and steps
  - h. Details of tap changer
  - i. Neutral grounding transformer/Resistor values
  - j. Type of Cooling
- (23) Equipment details:
- a. Circuit Breakers
  - b. Isolating switches
  - c. Current transformers
  - d. Potential transformers
  - e. Lightning arresters
- (24) Relaying and Metering:
- a. Relay protection installed for transformers and feeders along with their settings and level of coordination with others
  - b. Transmission Metering details
- (25) Transmission Lines Right of Way and Trace Clearance.
- (26) Details of Communication and SCADA Facilities available.
- (27) Total System Peak Load to be connected.
- (28) Maximum Capacity of Network (MW, MVA<sub>r</sub>).
- (29) Health & Safety Policy.
- (30) EIA for new transmission lines.

**SCHEDULE 2A-III**  
**REQUIREMENTS FOR APPLICATION FOR ELECTRICITY**  
**SYSTEM OPERATOR LICENCE**

**Rule 5(2)(c)**

- (1) Completed Application Form.
- (2) Certificate of Incorporation and Memorandum and Certificate of Business Registration and Articles of Association, or Deed of Partnership.
- (3) Evidence of lease or other acquisition of land (as applicable).
- (4) Tax Clearance Certificate for immediate past three (3) years (if applicable).
- (5) Business Plan.
- (6) Network configuration.
- (7) Line Voltage Level
- (8) Interconnection Points.
- (9) Ownership of main, supplementary, and Regional Control Centers.
- (10) Major Control facilities / equipment available at the control centers.
- (11) Communication facilities (PLC, Radio links, VoIP, Fibre Optic, etc.).
- (12) System Planning (including operation) capability.
- (13) System Operators training and certification facility or alternative.
- (14) Ability to procure and pay for ancillary services.
- (15) Functional Energy Management System Equipment / Facilities.
- (16) Operational Procedure for Dispatch Operators (if available).
- (17) Health & Safety Policy.

**SCHEDULE 2A-IV**  
**REQUIREMENTS FOR APPLICATION FOR ELECTRICITY**  
**DISTRIBUTION LICENCE**

**Rule 5(2)(d)**

- (1) Completed Application Form.
- (2) Certificate of Incorporation and Memorandum and Certificate of Business Registration and Articles of Association, or Deed of Partnership.
- (3) Evidence of lease or other acquisition of land (as applicable).
- (4) Tax Clearance Certificate for immediate past three (3) years (if applicable).
- (5) Business Plan.
- (6) Power Purchase Agreement with Generating Licensee.
- (7) Network Agreement with Transmission Licensee.
- (8) Where applicable, Retail Agreement with end-user(s) for supply of power.
- (9) For new (greenfield) facilities:
  - a. MoU with or letter of intent from Engineering Procurement Contract (EPC) Contractor (if applicable).
  - b. MoU with or letter of intent from the technical partner (if applicable).
  - c. Financing Agreements or letter to fund the project from financial institution(s).
  - d. Feasibility study, including economic and financial analysis and social impact assessment.
- (10) A detailed forecast of the demand for electricity in the area of supply, disaggregated by customer category.
- (11) Estimates of number of customers, by customer category
- (12) Estimates of technical and non-technical losses
- (13) Estimated number and duration of outages for previous year
- (14) Project location.
- (15) Line Voltage Level (33 kV, 11 kV, 415 V, & 230 V)
- (16) Connection Point(s).
- (17) Pole type (Wood, Concrete, Steel, etc.).
- (18) Installation method (overhead, underground, etc.).
- (19) Detailed project design:
  - a. Site map

- b. Single-Line Diagram
  - c. Control Rooms
  - d. Sub-stations
- (20) Line Length.
  - (21) Distribution Environmental Impact Assessment (EIA).
  - (22) Transformer(s) type & data (attach nameplate data of all transformers).
  - (23) Projected Peak Load to be connected.
  - (24) Maximum Capacity of Network (MW, MVar).
  - (25) Bill of Engineering Measurement and Evaluation of the project.
  - (26) Details of protection Equipment.
  - (27) Health and Safety Policy.
  - (28) Types of metering systems and technical specifications of meters.

**SCHEDULE 2B-I**  
**REQUIREMENTS FOR APPLICATION FOR A WATER**  
**PRODUCTION LICENCE**

**Rule 5(2)(e)**

**1. General Water System Information**

(1) Description of the proposed water supply system:

- a. Name of the water supply system
- b. Number of service connections for which the proposed facilities are being designed
- c. Information on the number of population to be served by the facility
  - (a) Number of persons that will have access to or may use water from the water system
  - (b) Estimates of the number of residential, commercial, school, industrial, public taps, and agricultural connections expected to be served by the system
- d. Information about the date of construction and/or rehabilitation of the water supply system
- e. Service areas to be covered by the water supply system

(2) Map of facilities showing locations of:

- a. Proposed water source(s)
- b. Catchments areas
- c. Treatment facilities
- d. Storage facilities
- e. Primary transmission lines

(3) Feasibility study, including environmental impact assessment, economic and financial analysis and social impact assessment

(4) Five (5)-Year forecasts of the demand and supply plan for water in the area of supply, disaggregated by customer category

(5) Number of customers, by customer category and service area

(6) Technical and non-technical losses

(7) Five (5)-Year forecasts of supply by source

- (8) Relevant contracts or agreements with other water service providers (including bulk suppliers or water resellers)
- (9) Approved tariffs in use (if applicable)

## **2. Source Water Information**

### (1) Description of the source:

- a. Nature of source of water (surface water, ground water, sea water)
- b. Type of source water collection structure (dam, wells, rivers, sea water )
- c. Capacity of source (dam storage capacity [m<sup>3</sup>], well/river capacity [liter/sec])
- d. Location of source
- e. Raw water quality, reported by season
- f. Full description of intakes (if source is surface water)
- g. Information on existing and proposed wells and boreholes (depth of water table, recharge, etc., max. pumping rate) (if source is groundwater)

### (2) Water abstraction rights:

- a. Copy of water use permit from the Authority authorising to raw water abstraction of x liter/sec or m<sup>3</sup>/hour or per day, or per year

### (3) Quantity of source water abstraction:

- a. Demonstrate that proposed source is sufficient to reliably serve the anticipated water demands for at least thirty (30) years considering all consumption projections
- b. Establish water demand in the service area forecasted for five (5) years for
  - (a) Source
  - (b) Distribution, and
  - (c) Entire system

### (4) Water source safety plan:

- a. Report of the assessment of vulnerability of the water system to contamination (due to mining, agricultural, commercial and domestic activities)
- b. Remedial actions proposed if the source is susceptible to contamination

### (5) Water source quality analysis:

- a. Report on analysis by Competent Authority on samples of raw water tested and propose source water treatment



### **3. Treatment and Design Information**

(1) Description and layout:

- a. Type of water treatment and treatment scheme to be used, or currently being used
- b. Demonstration that appropriate treatment will be supplied to ensure water quality meets drinking water standards in accordance with WHO Standard
- c. Electricity supply requirements for treatment system
- d. Source of electricity for treatment system
- e. Flow diagram showing locations and relationships of individual treatment process units
- f. Backwash system information

(2) Design capacities:

- a. Design criteria/parameters used for the treatment units
- b. Planned design capacities
- c. Operational capacities (if different from design capacity)

(3) Treatment chemicals:

- a. Type of chemicals currently used/planned to be used
- b. Dosages
- c. Method of feeding chemicals
- d. Demonstration that all chemicals used in water treatment comply with national standards

(4) Disinfection facilities:

- a. Equipment to be used
- b. Feed rates
- c. Residuals
- d. Contact times
- e. CT values

(5) Storage:

- a. Capacity of treated water storage tanks at the treatment plant
- b. Capacity of any other storage tanks

(6) Material used for storage construction

(7) Description of sludge treatment and disposal arrangements

(8) Description of the treatment process control and metering plan

#### **4. Transmission System Information**

(1) Layout of the transmission system showing:

- a. Transmission pipe dimension (Diameters, Length, Materials)
- b. Maximum pressure
- c. Pumping stations (pumping rate, pressure, energy consumption)
- d. Service Reservoirs (storage capacity, material, frequency of storage cleaning, etc.)
- e. Valves
- f. Type of System Control philosophy
- g. Type of Bulk meters

**SCHEDULE 2B-II**  
**REQUIREMENTS FOR APPLICATION FOR A WATER**  
**DISTRIBUTION LICENCE**

**Rule 5(2)(f)**

**1. Distribution System Information**

(1) Layout (in addition to overall map required under general information) showing locations of:

- a. Pumping stations
- b. Storage tanks
- c. Mains
- d. Hydrants
- e. Isolation valves
- f. Flushing valves
- g. Standpipes and public taps

(2) Water mains:

- a. For all distribution mains:
  - (a) Locations
  - (b) Sizes
  - (c) Lengths
  - (d) Depths
  - (e) Type of materials used
- b. Special protections used where water main crosses over:
  - (a) Roads
  - (b) Bridges
  - (c) Railways
  - (d) River crossings/wetlands

(3) Pumping stations and storage tanks:

- a. Descriptions
- b. Specific designs
- c. Capacities

(4) Distribution pressure:

- a. Report with sufficient design information to demonstrate that system has been designed to sustain a minimum pressure of two (2) bars throughout the distribution system at all times

## **2. Operational Plans:**

### (1) Water Quality Monitoring Plan:

- a. Describe methods to comply with standards and regulations
- b. Locations of sampling points
- c. Frequency of sampling at each point
- d. Types of analyses to be run on the samples
- e. Personnel to collect the samples (e.g., certified water system personnel, certified laboratory) and the training they have or will receive

### (2) Water System Operations Plan:

- a. Leakage detection and repair
- b. Other routine maintenance

### (3) Disaster/Emergency Response Plan:

- a. Notification to Commission
- b. Notification to consumers
- c. Actions to be taken in event of emergency (earthquake, water supply disruption, power outage, contamination incident, etc.)

### (4) Customer Services:

- a. Service hours per day
- b. Strategies to handle complaints raised by consumers
- c. Response time to address complaints

## **3. Commercial and Financial Information**

### (1) Asset register including status of condition of asset

### (2) Financial statements (profit & loss, cash flow statement, and balance sheet) for previous three (3) years

### (3) Expenses, including:

- a. Wages and salaries
- b. Royalty fees

- c. Operation and maintenance cost
- d. Depreciation
- e. Other financial expenses

#### **4. Environmental Impact Assessment**

- (1) Demonstrate that the project complies with environmental standards set by EPA

#### **5. Contractors Obligations**

- (1) It is a drinking water supplier's duty to provide customers always with drinking water of impeccable quality, in sufficient quantity and at the supply pressure that is necessary to properly cover the usual demand in the supply area.
- (2) To comply with the duties to be performed, the drinking water supplier must be able to deal with or to guarantee execution of project activities.
- (3) The drinking water supplier therefore to demonstrate the overall project activities in an appropriate and professional manner in the following field:
  - a. Water Supply concept;
  - b. Operation and Maintenance strategy and concept;
  - c. Rehabilitation strategy and concept;
  - d. Planning, construction, operation and maintenance of drinking water supply facilities and infrastructure with associated documentation;
  - e. Monitoring of water protection areas and untreated water;
  - f. Monitoring the quality of drinking water and ensuring at the customer tap an adequate drinking water quality;
  - g. Provision of water, resource management;
  - h. Network monitoring, control;
  - i. Risk analysis and its assessment;
  - j. Specification of monitoring strategies and control measures;
  - k. Operation and maintenance of technical equipment;
  - l. Organisation and implementation of standby emergency service;
  - m. Action plans according to Drinking Water Ordinance;
  - n. Preparedness planning for states of emergency;
  - o. Specification of personnel configuration and structure;

- p. Target for advanced and further training of own personnel;
  - q. Occupational safety and health protection, environmental protection;
  - r. Acquisition and administration of real estate property rights and rights of way;
  - s. Acquisition of supplies and services;
  - t. Selection and monitoring of service provider;
  - u. Materials management / stock keeping;
  - v. Keeping the fitter register;
  - w. Customer service;
  - x. Contractual and legal matters about water rights.
- (4) Interfaces and responsibilities for the fields of activity must be clearly defined. If possible, the activities mentioned or clearly delimited parts thereof can also be rendered by qualified service providers. Irrespective of this, the responsibility of the top management remains.

## **6. Personnel qualification**

- (1) Employees employed to the project must show adequate qualification for the respective activity.
- (2) Compliance with the respective qualification requirements must be ensured prior to assigning the tasks.

## **EXPLANATORY MEMORANDUM**

**(This explanatory memorandum is not part of these rules but is intended to indicate its general purport)**

This statutory instrument is made pursuant to section 66 of the Sierra Leone Electricity and Water Regulatory Commission Act 2011. This instrument is divided into 4 parts.

Part I covers the interpretation and application provisions. The interpretation provision defines words and expressions used throughout the instrument. The application provision stipulates that the instrument applies to regulated suppliers in the water and electricity sectors but should not apply to:

- (a) electricity mini-grid or off-grid system;
- (b) electricity generation plant whose output is solely for the use of the producer; or
- (c) production and distribution of water other than through pipelines.

Part II covers provisions relating to electricity licences.

Part III covers provisions relating to water licences.

Part IV contains miscellaneous provisions.

*Made this 13th day of December, 2019.*

**MOHAMED D. B. SESAY**  
Chairman