



TECHNICAL ASSISTANCE FOR THE RWANDA UTILITIES REGULATORY AUTHORITY (RURA) TO DRAFT A REGULATION FOR DISTRIBUTED ENERGY RESOURCES IN RWANDA

DRAFT REGULATION FOR DISTRIBUTED ENERGY RESOURCES (DER)

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DRAFT REGULATION FOR DISTRIBUTED ENERGY RESOURCES (DER)

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Authority (RURA) to Draft a Regulation for Distributed Energy

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<u>DRAFT REGULATION FOR DISTRIBUTED ENERGY RESOURCES</u> (DER) IN RWANDA

Pursuant to Law n°09/2013 of 01/03/2013 establishing the Rwanda Utilities Regulatory Authority;

Pursuant to Law N°52/2018 of 13/08/2018 Modifying Law N°21/2011 of 23/06/2011 Governing Electricity in Rwanda as Modified to Date;

The Regulatory Board of the Rwanda Utilities Regulatory Authority in exercise of its powers

HEREBY issues the following Regulation on Distributed Energy Resources in Rwanda:

CHAPTER I: GENERAL PROVISIONS

Article I: Citation

This Regulation may be cited as the Regulation for Distributed Energy Resources in Rwanda

Article 2: Purpose

- (I) The Purpose of this Regulation is to provide a standard and simplified registration and licensing regulatory framework for DERs of 500kW and below for captive use to ensure:
 - a. Promotion of DERs as a viable and cost-effective option in delivering energy services to customers
 - b. Compliance with applicable health, safety and environmental standards
 - c. Regulatory oversight to ensure the sustainability of the electricity market
- (2) This Regulation shall not apply to diesel generators used for standby power provision

Article 3: Definitions of Terms

- (1) In this Regulation, unless the context otherwise requires:
- "Authority" means Rwanda Utilities Regulatory Authority.
- "Captive Power" refers to generation for internal consumption in residential buildings, commercial, industrial and institutional facilities.
- "Competent Authority" refers to any person that has the legally delegated or invested authority, capacity, or power to perform a designated function or issue any regulation in accordance with the laws of Rwanda.
- "DER Licensee" refer to any person who holds one of the licenses issued by the Authority under this Regulation.

- "Distributed Energy Resources or DER" means any resource located on the distribution system, any subsystem thereof or behind a customer meter for the purpose of supply of captive power. These resources may include but are not limited to electric storage resources, distributed generation, demand response, energy efficiency, and thermal storage and their supply equipment. Diesel generators are excluded from DERs for the purpose of this Regulation.
- "EIA" means Environmental Impact Assessment.
- "Electricity Law" refers to The Law N°21/2011 of 23/06/2011 governing the electricity sector in Rwanda, as amended.
- "Generator" means any device which converts any form of energy not derived from a utility licensee's electrical system into electrical energy.
- "Grid" means the interconnected distribution and transmission network facilities and system operated by the utility licensee.
- "KVA" means kilo-Volt Ampere.
- "KVAr" means Kilo-Volt Ampere Reactive.
- "KW" means Kilo-Watt.
- "License" refers to any document issued by the Authority which authorizes the licensee to carry out the activities specified in the license under the conditions prescribed therein.
- "Licensee" refers to any person who holds one of the licenses issued by the Authority under this or any other Regulation.
- "Own consumption" means exclusively for own consumption by the operator on the premises of which the operator is the occupier.
- "Person" refers to any individual, company, partnership, organization or any association of individuals than can sue or be sued under the laws of Rwanda.
- "Primary Source of Power" refers to the constant use of a DER installation by a DER customers as a main source of power supply, where the DER customer is connected to the grid and grid power is available for use
- "Registrant" means a person who holds a registration certificate issued by the Authority which authorizes him to carry out activities specified in the registration certificate under the conditions prescribed therein.
- "Registration" means the submission to the Authority of a registration form as shown in Annex I by a DER owner for one or more system(s) above 5kW and below 50kW system capacity for own consumption.
- "Registration Certificate" means an official document issued by the Authority which provides proof of registration of DER system(s) above 5kW and below 50kW system capacity for own use.
- "Regulatory Board" refers to the Regulatory Board of the Rwanda Utilities Regulatory Authority;
- "RURA" refers to the Rwanda Utilities Regulatory Authority.

"Third Party DER Provider" refers to any person who installs a DER system for captive power for the use of an electricity customer within the customer's premises, and the business model for supply of energy by that person to the customer is based on an energy sales contract or a leasing or lease to own contract.

"Utility licensee" refers to the licensee who has been issued a license by the Authority for the purpose of providing electricity distribution and transmission services in Rwanda

- (2) Words importing any one gender includes the other gender, and the singular includes the plural and vice versa.
- (3) Words or expressions used in this Regulation but not defined, unless the context otherwise requires, shall have the same meanings respectively assigned to them in the Electricity Law.
- (4) Any reference to a statute or statutory provision includes a reference to that provision as amended, re-enacted or replaced and any regulations or orders made under such provisions from time to time; and
- (5) If the date on which an event is scheduled to occur by this Regulation is a day which is not a business day, then the event shall be deemed to occur on the next business day.

Article 4: Scope of Application

This Regulation applies to:

- (I) A person with installed, or intending to install a Distributed Energy Resources (DER) for own consumption of a system capacity above 5kW and below 50kW, subject to registration;
- (2) A person with installed or intending to install a DER for own consumption of a system capacity from 50kW and up to 500kW, subject to a license; and
- (3) A third-party DER provider with installed or intending to install and/or sell electrical power from a DER with a system capacity above 5kW and up to 500 kW for the use of a single customer within the customer's premises, subject to a license.

CHAPTER II. REGISTRATION AND LICENSING REQUIREMENTS

Article 5: DERs Subject to Registration

- (I) Any person who intends to install a DER with a system capacity as above 5kW and below 50kW for own consumption must register with the Authority.
- (2) Prior to installation, each DER system at a customer's premises shall be registered.
- (6) The application for registration shall be submitted through the Authority's online licensing platform using the form attached as Annex I of this Regulation

Article 6: Registration Process

(I) The registration process for DERs shall be done by completing the DER registration form on the licensing platform on the Authority's website.

- (2) Every registration form shall be fully completed, and all information requested must be provided by the applicant.
- (3) Within 30 calendar days of the receipt of a completed application form, the Authority shall issue the applicant with a registration certificate subject to any terms that may be contained on the certificate.
- (4) Where the Authority has specified any terms or conditions on the registration certificate, the registrant shall be obliged to comply with such terms and conditions.

Article 7: DERs Subject to a DER License

A DER license is required for:

- (I) Any person who intends to install a DER system with capacity from 50kW to 500kW where the system is installed by the owner solely for own consumption within the person's premises.
- (2) Any person who intends to install a DER system with capacity above 5kW and up to 500kW where the DER system will be installed by a third party DER Provider for the sole use of a single customer within the customer's premises.

A DER that is interconnected to an electricity distribution system as an interconnected DER shall be required to obtain a regular generation license from the Authority and is not required to obtain a DER license.

Article 8: Required Documents to Apply for a DER License

- (1) An Application shall be in the form specified in Annex 2 of this Regulation and shall contain the information specified therein.
- (2) An application for a DER license shall be submitted to the Authority in the manner prescribed by the Authority using the online licensing platform on the Authority's website.
- (3) An application shall be signed and dated by the applicant or authorized representative of the applicant.

Article 9: Required Technical Information to Apply for a DER License

An application for a DER License shall specify the following as contained in the application form:

- (I) Proposed location of the DER system;
- (2) Capacity of the installation which is the maximum power (kW, kVA, kVAr) and energy (kWh) expected to be available at any one time;
- (3) Provide proof of the technical capacity of applicant to install, operate and maintain the installation;
- (4) Company registration certificate specifying that electricity services are one of the businesses to carry out (for third party DERs);
- (5) District Authorization approving planned activities at the site (if applicable);

- (6) Where applicable, an Environmental Impact Assessment Certificate; and
- (7) Copy of the Power Purchase Agreement/Energy Supply Contract or Assets Lease Contract with the Premises Owner/Customer (for Third Party DERs).

Article 10: DER License Application Process

- (1) The Applicant shall, upon submission of the application form in Article 8 (2), pay a non-refundable License Application fee as specified in Annex 5 of this Regulation.
- (2) On receipt of the application, the Authority shall note on the application, the date of its receipt and shall send to the Applicant an acknowledgement stating the date of receipt.

Article II: DER License Application Review

- (I) Upon receipt of the application for a DER license, the Authority shall evaluate the application, and may require the Applicant to furnish, within a specified period, any additional information, provided that the time between the receipt of the application and the accompanying documents and date on which the Authority notifies the Applicant of the inadequacy of the documents and information shall not exceed fourteen (14) days.
- (2) If the Authority finds the application to be complete, it shall certify that the application has been duly made and is ready for consideration for issuance of a DER license.
- (3) The Authority shall issue a DER license to an applicant that demonstrates the following:
 - a. The Applicant has demonstrated the ability to fulfil all technical, operational, safety and other conditions in accordance with applicable laws, regulations, and standards;
 - b. The Applicant has not had a license revoked or been found liable for significant license violations in Rwanda or another country within the past ten (10) years;
 - c. The Applicant fulfils all established criteria for the protection of the environment;
 - d. The Applicant must demonstrate that he will comply with all applicable laws and other regulations, including but not limited to, the Authority regulations and decisions; and
 - e. Any other substantive criteria determined by the Authority to fully protect the public health, safety, and welfare.

The Authority shall thereafter issue its decision on the application as promptly as possible, but in no event, no later than sixty (60) days following receipt of a complete application.

CHAPTER III. LICENSE CONDITIONS

Article 12: Term of License

- (I) The term of a DER license shall be for a period not exceeding 10 years.
- (2) The DER license may be renewed upon application by the DER licensee for the same term of years.

Article 13: Payment of Regulatory Fees

(1) Third Party DER Licensees shall be obliged to pay the annual regulatory fees payable by licensees as prescribed by the Authority.

Article 14: License Modification

- (I) The terms and conditions of a DER license may be amended either on application by the DER licensee or as initiated by the Authority.
- (2) The Authority may modify a DER license before the expiration of the license term when it determines that a modification of the DER license is needed if:
 - a. The DER licensee is not in compliance with any provisions of this Regulation or term or condition of the DER license due to events beyond the DER licensee's control; or
 - b. It has evidence that the DER licensee is not in compliance with any provisions of this Regulation or other Rules, Decisions or Orders of the Authority, or term or condition of the DER license.
- (3) Unless otherwise specified in writing by the Authority, each application for a modification made by the DER licensee shall be in the format specified in Annex 3 and accompanied by a receipt of such fees specified in Annex 5.

Article 15: License Renewal

- (I) A DER licensee shall file an Application for a DER license renewal no more than three hundred and sixty-five (365) days and no less than ninety (90) days prior to the expiration of the existing DER license in accordance with the form specified as Annex 4.
- (2) The DER license renewal process shall be subject to the same procedures as an initial DER license application, provided that where an existing DER licensee is in compliance with the provisions of this Regulation or terms and condition of the DER license, the Authority shall consider an expedited renewal of the existing license following the application.
- (3) The term of a renewed DER license shall be for a period not exceeding 10 years for each renewal period.

Article 16: License Transfer

- (I) Transfer of a DER license including the direct or indirect sale, assignment, conveyance, lease or other transfer of assets or activities subject to a DER license to another person shall be subject to a prior written approval of the Authority.
- (2) Such approval shall be granted by the Authority after due consideration and if the proposed transferee meets all the conditions for granting the DER license.

- (3) An application for a transfer of a DER license shall be initiated by the DER licensee. Until the Authority has issued an approval of the transfer, no licensee can transfer its DER license to a third party.
- (4) A DER license transfer application review is conducted in the same manner as review of a DER license application. For purposes of the review, the transferee shall be deemed the Applicant that will assume responsibility for being in compliance with the provisions of this Regulation or term or condition of the DER license. The term of the DER license and the license terms and conditions shall remain the same as the original license's term unless the license transferee requests a license modification as part of the transfer application.
- (5) The Authority shall issue its decision on the application as promptly as possible, but in no event, no later than sixty (60) days following receipt of an application for a DER license transfer.
- (6) Where a DER licensee fails to obtain the approval of the Authority before effecting a transfer of the license to another person, this shall be a ground for the suspension or revocation of the DER license.

Article 17: License Revocation

- (I) The Authority may on its own initiative or upon receiving a complaint or information from any person, or other licensees, initiate an inquiry into the conduct or functioning of any DER licensee.
- (2) The Authority may revoke a DER license if it determines that:
 - a. The DER license was issued through fraud, or the misrepresentation, or non-disclosure of a material fact;
 - b. The DER licensee has wilfully or unreasonably contravened any provisions of this Regulation that is applicable to the DER licensee;
 - c. The DER licensee has failed to comply with any term or condition of the DER license, the breach of which is expressly declared to render it liable to revocation; or
 - d. The DER licensee becomes insolvent or is adjudged bankrupt.
- (3) When the Authority determines that enough grounds exist for the revocation of the DER license, it shall give notice of proceedings for the revocation of the DER license to the DER licensee and to such other persons, group of persons or body as it may consider necessary.
- (4) The Authority's DER license revocation proceeding shall be in the manner prescribed by this regulation, provided that:
 - a. The Authority shall notify the DER licensee in writing of its intention to revoke the license and the reasons for doing so; and
 - b. The DER licensee shall be given the opportunity to demonstrate, within twenty-one (21) days of the delivery of such notification, that the circumstances have changed, such that the revocation may no longer be warranted.

Article 18: License Revocation Proceeding

- (I) A DER license revocation proceeding shall be conducted in the following manner:
 - a. The Authority shall commence a DER license revocation proceeding by sending a written notice to the DER licensee informing the licensee of its intention to commence a revocation proceeding, stating the grounds for the proposed revocation, and requiring the DER licensee to file a response.
 - b. The DER licensee shall be given the opportunity to demonstrate, within twenty-one (21) days of the delivery of such notification, that the circumstances have changed such that the revocation may no longer be warranted.
 - c. If the DER licensee contests the revocation or fails to respond to the Authority's notice within twenty-one (21) days of receipt of the revocation proceeding, the Authority shall hold a hearing on the DER license revocation.
 - d. If, during the revocation proceeding, the DER licensee presents evidence to rebut the allegation and/or cures the alleged violation that gave rise to the revocation proceeding, the Authority may terminate the DER license revocation proceeding.
- (2) The Authority may in lieu of revoking the DER license, issue an order imposing further terms and conditions subject to which the DER licensee is permitted to operate thereafter.

Article 19: Register of Registration Certificates and DER Licenses

- (I) The Authority shall maintain a register of all DER Registration Certificates issued.
- (2) The Authority shall maintain a register of all DER licenses issued.
- (3) The register shall contain complete copies of the licenses, as well as all documents in the record of the license application process, or any related license modification, renewal or revocation, including:
 - a. Application for DER license;
 - b. Documents submitted with the application for DER license;
 - c. All correspondences pertaining to the application for DER license as well as the Regulatory Board decisions; and
 - d. Any documents pertaining to an enforcement action by the Authority related to the DER licensee
- (4) The Authority shall maintain a summary register in electronic form, consisting of at least the following data:
 - a. Registration Certificate/License number;
 - b. Name, address, phone number and e-mail of the registrant/licensee;
 - c. The effective date and term of the license; and
 - d. The date of any ruling on license modification or revocation.

- (5) The Authority shall make all information in the DER license register available to the public, subject to the Authority's Confidentiality rules.
- (6) The Authority shall maintain a docket of all pending license applications or license related proceedings, with information on the date the proceeding was opened and the estimated period needed for decision upon the license.

Article 20: Dispute Resolutions and Appeals

- (I) Any person who is aggrieved by a decision of the Authority not to issue a license, a refusal by the Authority to renew a license, any modification of a license or a refusal by the Authority to modify a license, or the revocation of a license, may apply to the Regulatory Board for review of the Decision, Order or Refusal, within thirty (30) days of the issuance of the Decision, Order or Refusal.
- (2) The Regulatory Board shall, in accordance with its Dispute Resolution Regulation, reaffirm, reconsider, vary or rescind its decision before issuing a final Order.
- (3) Such review or reconsideration shall be completed within sixty (60) days of the date it is requested.
- (4) Where the applicant/DER licensee is still not satisfied with the decision of the Regulatory Board, the applicant/DER licensee may appeal before a competent Court.
- (5) The Authority's decision shall remain effective pending a final judicial decision on the appeal.

CHAPTER IV. IMPOSITION OF CAPS AND COMPENSATORY PAYMENTS

Article 21: Imposition of Cap

- (I) The Authority may impose a cap on the overall capacity of DERs to be provided by third party DER Providers within a specified period based on the following criteria:
 - a. To ensure compliance with requirements of the Rwanda National Electrification Plan, and
 - b. To ensure the sustainability of the electricity market and to prevent market distortion.
- (2) The cap to be imposed by the Authority shall be agreed upon following a regulatory impact assessment including a stakeholder consultation process.
- (3) Where such a cap has been imposed by the Authority, it shall be published on the Authority's website; provided that the Authority shall give an advance notice of not less than 6 months before the imposition of the cap.
- (4) The imposition of a cap shall only be in respect of grid connected areas where the utility licensee provides electricity supply and DERs are used as the primary source of electricity.
- (5) Off-grid areas shall be exempted from the imposition of a cap on DER installations.
- (6) The cap shall also not apply to DERs that have been installed for the sole purpose of serving as a stand-by source of power or for residential purposes only.

- (7) Considerations for applications for a third party DER license following the imposition of the cap by the Authority shall be on a first come, first serve basis.
- (8) The Authority shall determine if and when circumstances change, or where the electricity market evolves to a point that the imposition of a cap is no longer considered necessary, and the Authority may thereafter issue an order for the cessation of the Imposition of a cap in the affected area(s).

Article 22: Utility Compensatory Charges

- (I) A Utility Compensatory Charge may be imposed by the Authority when the Authority, in issuing a DER license to third party distributed generators in grid connected areas, makes the following determinations:
 - a. The issuance of DER licenses has resulted in decreasing utility revenues to such an extent that the licensed utility has inadequate revenue to enable payment for its committed expenditures or is unable to earn a permitted rate of return on its assets despites its efficient operations, and
 - b. The impact of the partial or full exit of commercial and industrial DER customers from the network will result in the unreasonable increase of tariff payable by other grid connected customers.

Article 23: Form and Determination of Compensatory Charges

- (I) Utility compensatory charges shall be payable by each DER customer and be forwarded through an invoice issued by the licensed utility to the DER customer every month, based on the compensatory charge rate approved by the Authority.
- (2) The determination of compensatory charges shall be done following an application by the licensed utility supported by an impact assessment report of the impact of the full or partial exit of the DER customers from its network.
- (3) A public hearing with all key stakeholders in attendance shall be held by the Authority to determine the need for a compensatory charge and the appropriate level of compensation payable, if applicable.
- (4) The Authority shall periodically review the compensatory charges imposed and shall ensure that such review is done together within the tariff review timelines or at such other time as the Authority considers expedient to preserve the sustainability of the electricity market.
- (5) The Authority shall publish a guideline stipulating the basis and amount of compensatory charges payable by different categories of DER licensees. The Utility Compensatory Charge shall be a percentage of the charge that would have been paid to the utility by the DER customer if the customer had depended on the utility for all its energy needs during a given period of time (typically one year). The applicable percentage shall not exceed 10% of the tariff chargeable as per the DER Customer's tariff classification, provided that RURA may from to time review this maximum ceiling bases on the impact assessment.
- (6) The calculation for the compensatory charge shall be made using the formula in Annex 7 of this Regulation.

(7) The Authority shall determine when circumstances change, or the electricity market evolves to a point where the payment of the compensatory charges is no longer considered necessary. The Authority may thereafter issue an order for the cessation of the payment of the compensatory charges

CHAPTER V. TECHNICAL REQUIREMENTS

Article 24: Applicable Technical Standards

- (I) A DER system shall conform to the applicable technical standards set by the Authority and any other competent authority and shall also conform to all regulations pertaining to safety and installation of electrical systems, as applicable.
- (2) Every DER licensee shall comply with all the applicable technical standards as specified in the license.
- (3) If the applicable technical standards are not met or complied with, the Authority may revoke the DER license.

Article 25: Other Requirements Applicable to Installation of DERs

A DER licensee or registrant shall:

- (I) Ensure that only competent persons install the DER system in line with RURA Regulation 002/EL/Energy/RURA/2012 of 4th October 2012 on Electrical Installations;
- (2) Ensure that all safety equipment relevant to the DER installation is available, kept in good working condition and properly used and must further ensure that the quality of materials used in and on construction of the safety equipment are suitable for the purposes for which they are intended; and
- (3) Ensure that all equipment, machinery and apparatus used by the licensee or registrant in connection with the DER installation are suitable for the purposes for which they are used.

Article 26: Responsibilities in Connection with Operation and Maintenance of DERs

A DER licensee or registrant shall:

- (I) Comply with all statutory and regulatory requirements relating to health and safety, noise control, hazardous substances, emission control, environmental pollution and fire precaution and keep the nuisance, pollution and noise caused by the operation of the DER installation to such an absolute minimum as may be reasonably possible under the circumstances.
- (2) Maintain the DER installation in a safe condition to prevent damage to the health and safety of persons and to the environment and must install, operate, maintain, and inspect the installation in accordance with the manufacturer's instructions.
- (3) Ensure that in so far as applicable:

- a. Electrical installation, assets, equipment and staff and persons in the vicinity of the DER System are protected and kept safe from damage or harm;
- b. The electrical system, assets, equipment, staff and representatives of the licensee or registrant are protected and kept safe from damage or harm; and
- c. The DER licensee's or registrant's electrical installation contains sufficient electrical protection devices to protect the utility licensee's electrical system and installation and any equipment that may have an interface to it from any abnormal operating conditions caused by the DER licensee.

Article 27: Reporting Obligations of DER License Holders

- (I) A DER licensee shall provide the Authority with such information as the Authority may require within the timeframe specified, or, if so requested by the Authority, provide the Authority with access to such information.
- (2) A DER licensee shall on an annual basis, submit a report on the status of the DER system to the Authority using the reporting template specified in Annex 6.
- (3) If a DER licensee becomes aware that an incident or accident has occurred on the DER system under the DER licensee's control, and such incident or accident caused a serious injury to, or the death of, a person, including an employee of the licensee, the licensee shall within 24 hours of the occurrence of the incident or accident, provide the Authority with a copy of the notification and report of the incident or accident as well as copies of all other notifications, reports or the like provided by the DER licensee to any authority under any applicable law.

CHAPTER VI. SALE OF SURPLUS CAPACITY

Article 28: Exemptions from Sale of Surplus Capacity

Unless prior authorization is given by the Authority, no DER licensee shall sell surplus capacity to the grid or a third party.

Article 29: Conditions for Sale of Surplus Capacity

- (I) A DER licensee who intends to sell surplus capacity to the grid must apply for a generation license in compliance with the LAW N°52/2018 OF 13/08/2018 modifying law Nº 21/2011 OF 23/06/2011 governing Electricity in Rwanda, as modified. Any DER licensee who intends to sell excess capacity to another person other than the owner of the premises where the DER is installed and used, shall send a written request for authorization to the Authority.
- (2) The request for sale of excess capacity may only be considered where the proposed off-taker(s) occupy adjoining premises to the premises where the DER system is installed and there is no interference with the network of the licensed utility.
- (3) The DER licensee shall wait for written authorization and approval from the Authority before selling surplus capacity to another person.

CHAPTER VI. MONITORING AND ENFORCEMENT

Article 30: License Monitoring Requirements

The Authority shall ensure safety during installation, operation, and maintenance of the DER installations. Accordingly, the Authority or any Independent DER Inspector appointed by the Authority to act on the Authority's behalf may:

- (I) At any reasonable time, enter the premises of a DER licensee for purposes of inspecting such DER licensee's DER system, distributed generation activities and any associated equipment, machinery, apparatus or information; provided that the permission to enter the premises is requested in wrting and obtained from the owner of the premises, such permission not to be unreasonably withheld.
- (2) Request the DER licensee to provide the Authority with such reasonable assistance as the Authority may require during the inspection.
- (3) Require the DER licensee to run such tests as may be specified by the Authority or the Independent Inspector.
- (4) Require the DER licensee to make such changes or additions as the Authority may reasonably require to ensure compliance with applicable technical standards.

Article 31: License Enforcement Action

- (1) If the Authority determines that the DER licensee has failed to comply with any provisions of this Regulation or term or condition of the DER license, the Authority shall send a written warning to the DER licensee including a deadline for correction of the alleged license violation.
- (2) If the DER licensee, after receipt of the warning from the Authority, does not cure the alleged non-compliance within the specified timeframe, the Authority may commence an enforcement proceeding, which may lead to monetary sanctions, injunctions, and/or license modification or revocation.
- (3) If the DER licensee cures the violation within the specified timeframe following receipt of the Authority's notice, the Authority may still commence an enforcement proceeding in order to impose monetary sanctions to penalize the violation in cases of repeated violations of more than two cases.

Article 32: Administrative Sanctions

(I) Any person who operates a DER installation in violation of this Regulation without a license shall be liable to an administrative fine of three million Rwanda Francs (3,000,000 FRW) and an order of cessation of the operation of the DER installation until a valid license is obtained.

- (2) Any DER licensee who fails to provide the required information to the Authority as specified in this Regulation shall be liable to an administrative fine as stipulated in the law establishing the Authority and determining its mission, powers, organization and functioning.
- (3) Any DER licensee who fails to submit a report, within the specified time period specified for the submission of the report by the Authority, shall be liable to a fine of One Hundred thousand Rwandan Francs per day (100,000 FRW) applicable up to 30 calendar days from the deadline given, after which further proceedings for license revocation may start.
- (4) Any DER licensee who fails to comply with the applicable technical standards for DER installations shall be liable to an administrative fine of One Million Rwandan Francs (1,000,000 FRW) and the Authority may impose an order for suspension of operations until the applicable technical standards are met.

CHAPTER VII. MISCELLANEOUS

Article 33: Transitional Period

- (I) Any person with an installed DER system above 5kW and up to 50kW shall apply for a registration certificate in accordance with this Regulation within six (6) months of the date on which this Regulation enters into force.
- (2) Any person with an installed DER system up to 500kW, subject to a license, and not in possession of a license issued by the Authority when this Regulation enters into force, must apply for a DER license in accordance with this Regulation within six (6) months of the date on which this Regulation enters into force.
- (3) The terms and conditions of any existing DER licenses granted by the Authority prior to the date this Regulation enters into force shall remain valid for the duration of the existing license.
- (4) The requirement for payment of license fees and compensatory charges shall not be applicable to DERs already operational prior to the enactment of this Regulation; provided however that applications for registration or licenses for the DERs are made within 6 months of the enactment of this Regulation as stipulated in this Article 33.

Article 34: Commencement

This Regulation shall come into force on the date of signature by the Chairperson of the Regulatory Board.

ANNEX I: DER REGISTRATION APPLICATION FORM

(Pursuant to Article 5 of the RURA DER Regulation (2021))

IMPORTANT NOTE: (The Authority reserves the right to verify the accuracy of this information.

In compliance with the RURA DER Regulation, 2021, I hereby certify that I [NAME], intend to install a DER with a capacity of (kW) and hereby apply to register my DER in accordance with the DER Regulation.

1.0 PARTICULARS OF APPLICANT AND CONTACT PERSON

Name of Applicant:
Physical address:
Tel:
Mobile Phone:
E-mail:
Name of Contact Person:
Mobile Phone of Contact Person:
E-mail of Contact Person:
2.0 LEGAL STATUS OF APPLICANT
2.1 Indicate legal status of Applicant (Tick relevant option)
A. □ Individual
B. □ Sole Proprietorship
C. □ Partnership
C. □ Public Limited Liability Company
D. □ Private Limited Liability Company
E. □ Cooperative Society
F. □ Incorporated Trustee
G. □ Other (please specify)
(Attach Certificate of Registration, Certificate of Incorporation, Memorandum and Articles of
Association, Deed of Partnership, Deed of Trust, as applicable)

3.0 MAIN BUSINESS ACTIVITIES OF APPLICANT

Please indicate the main business activities the Applicant is currently engaged in, if applicable

5.0 DESCRIPTION OF DER

- 5.1 Site of the DER (District, Sector, Cell, Village)
- 5.2 Generation

DER	SYSTEM TYPE	SIZE (kW)
Generation	□ Solar	
	□ Wind	
	☐ Biomass	
	□ Diesel	
	□ Hydro	
	□ СНР	
Storage		
Inverters		
Total Capacity		I

Is the DER installation new? If no, please state number of years the installation has been in operation

DECLARATION BY THE APPLICANT

I,	/we	here	by d	lecla	are t	that 1	the (details	stated	l above	are,	to 1	the	best o	of my	/our	knowl	edge	e, tru	e an	d
C	orre	ct.																			

Dated this	day of	20_	
THE SIGNATURE/ COMMON	N SEAL OF THE	WITHIN NAMED APPLIC	ANT
(Name of Applicant)			
Has hereunto been affixed in t	the presence of:		

Sign:			Sign:
Name:			Name:
Designation:			Designation:
Sworn to this day of	20	at	
BEFORE ME			
NOTARY PUBLIC/COMMISSIONER OF OATHS			

ANNEX 2: DER LICENSE APPLICATION FORM

RWANDA UTILITIES REGULATORY AUTHORITY APPLICATION FOR DISTRIBUTED ENERGY RESOURCES (DER) LICENSE

IMPORTANT NOTE: Your application is <u>not complete</u> unless all requirements herein are received and all questions are answered. (Please note that RURA reserves the right to verify the accuracy of this information; (Your application must be accompanied by the appropriate license application Fee)

1.0	PARTICULARS OF APPLICANT							
1.1	Applicant Information							
Name	e:							
	cal address:							
	Postal address:							
	e Phone:							
	il:							
1.2	Contact Person Information							
Name	e:							
	cal Address:							
Postal Address:								
Tel:								
	e phone							
E-mai	<u> </u>							

2.0 LEGAL STATUS OF APPLICANT

2.1 Indicate legal status of Applicant (Tick relevant option)

3.5 Has the Applicant had a license issued by the Authority revoked?

Yes/No

If yes, give details of the revocation

4.0 MAIN BUSINESS ACTIVITIES OF APPLICANT

Please indicate the main business activities the Applicant is currently engaged in.

				@IT\/
5.0	TECHN	ICAL	CAPA	CHY

Please provide detailed statement of Applicant's technical competence to operate the DER Installations. (Attach CV(s) of key technical personnel)

6.0 **DESCRIPTION OF DER INSTALLATION**

- 6.1 State Installation type
- 6.2 State total capacity of Installation
- 6.2 Location of Installation

(Please attach a Schedule of DER Installation design

6.3 Is the DER installation new? If no, please state number of years the installation has been in operation.

7.0 **TECHNICAL DATA**

- 7.1 Name Plate information and other relevant details: (provide applicable details)
 - (a) Installed Capacity
 - (b) Technology Type
 - (c) Rated Power Factor
 - (d) Reactive Power Capability
 - (e) Noise Level (State distance from Installation)
 - (f) Output Voltage
 - (g) Unit Frequency
 - (h) Unit Efficiency
 - (j) Make of DER

- (k) Year of Manufacture of DER
 - (Please provide single line diagram of the DER installation and protective devices)
- 7.2 Please attach the Environmental Impact Assessment Approval in cases where the applicable Law requires an EIA approval. Where EIA approval is not applicable, give detailed information on effluents, emissions and discharges and how they will be managed.
- 7.3 Copy of the Contract with the Premises Owner/Customer (for Third Party DERS)

Q	.0	וח	FCI	AR/		N RY	THE	ΛPPI	ICANT:
О	···	_ D		.An	4110	14 D I	1116	AFFL	ICAI1.

I/we hereby declare that the details sta correct.	ted above are, to the best of my/our k	nowledge, true and
Dated this day o	f	20
THE COMMON SEAL OF THE WITH	IIN NAMED APPLICANT	
(Name of Applicant)		
Has hereunto been affixed in the prese	ence of:	
Sign:	Sign:	
Name:	Name:	
Designation:	Designation:	
Sworn to this day of	20 at	
BEFORE ME		

NOTA	NOTARY PUBLIC/COMMISSIONER OF OATHS					
==== =OR C	PFICIAL USE ONLY					
l.	Date of submission of Application					
2.	Fees Paid and Receipt Number					
3.	Results of Verification for completeness					
1 .	Recommendation of RURA Electricity Division					
5.	Decision of the Regulatory Board					
7.	Issue date and expiration date of DER License					
3.	Other relevant information					

ANNEX 3: DER LICENSE MODIFICATION FORM

RWANDA UTILITIES REGULATORY AUTHORITY APPLICATION FOR MODIFICATION OF A DISTRIBUTED ENERGY RESOURCES (DER) LICENSE

(Your Application must be accompanied by the appropriate license Modifications Fee.)

1.0 PARTICULARS OF APPLICANT

I.I Applicant Information	
Name:	
Physical address:	
Postal address:	
Tel:	
Fax:	
Mobile Phone:	
E- mail:	
1.2 Contact Person Information	
Name:	
Physical Address:	
Postal Address:	•
Tel:	
Mobile phone	
E-mail	
2.1 Current DER License	
(a) License Number	
(b) Expiration date of the license	

hereunto been affixed in the presence of:

Draft Regulation on Distributed Energy Resources for RURA			
Sign:		Sign:	
Name:		Name:	
Designation:		Designation:	
Sworn to this day of	20	_	
BEFORE ME			
NOTARY PUBLIC/COMMISSIONER OF OATHS			
	=====		======
FOR OFFICIAL USE ONLY			
I. Date of submission of Application for Modification			
2. Fees Paid and Receipt Number			-
3. Results of Verification for completeness			
4. Recommendation of RURA Electricity Division			
6. Decision of Regulatory Board			
7. Issue date and expiration date the of the license			
8. Effective date of Modification			
9. Other relevant information			

ANNEX 4: DER LICENSE RENEWAL FORM

RWANDA UTILITIES REGULATORY AUTHORITY APPLICATION FOR RENEWAL OF A DISTRIBUTED ENERGY RESOURCES (DER) LICENSE

1.0 PARTICULARS OF APPLICANT

1.1 Applicant Information	
Name:	
Physical address:	
Postal address:	
Tel:	
Fax:	
Mobile Phone:	
E- mail:	
1.2 Contact Person Information	
Name:	
Physical Address:	_
Postal Address:	
Tel:	
Mobile phone	_
E-mail	
2.1 Current DER License	
(a) License Number	
(b) Expiration date of the license	

	ition(s)		
(a) Have you applied pr	reviously for a Renewal of	your License?	
(b) Has the Applicant e	ever been denied an applic	ation to renew a	License?
Yes/No			
If yes, give details of the	e denial.		
2.3 Term of Propose	ed Renewal		
(a) How many years do	oes the applicant want to r	enew the license	for?
(b) Any Other relevant	: Information (use addition	al sheets if appro	priate)
2 A DECLARATION	I DY THE ADDITIONS	- .	
I/we hereby declare the correct.		e are, to the best	of my/our knowledge, true and
I/we hereby declare the correct.		e are, to the best	•
I/we hereby declare the correct. Dated this	oat the details stated above day of OF THE WITHIN NAME	e are, to the best D APPLICANT	•
I/we hereby declare the correct. Dated this THE COMMON SEAL hereunto been affixed in the control of th	oat the details stated above day of OF THE WITHIN NAME in the presence of:	e are, to the best	20
I/we hereby declare the correct. Dated this THE COMMON SEAL hereunto been affixed in Sign:	OF THE WITHIN NAME	D APPLICANT	20
I/we hereby declare the correct. Dated this THE COMMON SEAL hereunto been affixed in the control of th	OF THE WITHIN NAME	D APPLICANT S	20 (Name of Applicant) has
I/we hereby declare the correct. Dated this THE COMMON SEAL hereunto been affixed in Sign: Name: Designation:	oat the details stated above the day of OF THE WITHIN NAME in the presence of:	D APPLICANT S	20 (Name of Applicant) has ign:

NOTARY PUBLIC/COMMISSIONER OF OATHS

Draft Regulation on Distributed Energy Resources for RURA

FOR OFFICIAL USE ONLY
1. Date of submission of Application for Renewal
2. Fees Paid and Receipt Number
3. Results of Verification for completeness
4. Recommendation of RURA Electricity Division
6. Decision of Regulatory Board
7. Issue date and expiration date the of the license
8. Date of Renewal and new expiration date of License
9. Other relevant information

ANNEX 5: DER APPLICATION AND LICENSE FEES

SCHEDULE OF FEES PAYABLE FOR LICENSES FOR DERS

S/N	DER Capacity (kW)	License Application Fees (FRW)	License Fees (FRW)	Renewal Fees (FRW)	License Transfer Fees (FRW)	Modification Application Fees (FRW)
1.	6-49 (3 rd Party)	46,000	50,000	46,000	0	0
2.	50 – 100	98,000	240,000	240,000	98,000	98,000
3.	101 – 300	98,000	420,000	420,000	98,000	98,000
4.	301-500	98,000	840, 000	840,000	98,000	98,000

- A DER License is unit and location specific
- Any material change in the DER system or location shall require a modification to the License
- Validity period cannot be pro-rated for less than a year

ANNEX 6: REPORTING REQUIREMENTS REPORTING FORM FOR DERS

In compliance with Ar	rticle 27 (2) of the RURA DER Regulations, 2021,
I [NAME],	present this report on the following DER Installation.
1.0 PARTICULARS	OF COMPANY; CONTACT PERSON AND DER INSTALLATION
Company Name:	
Physical address:	
Tel:	
Mobile Phone:	
E-mail:	
Name of Contact Pers	son:
Mobile Phone of Cont	act Person:
E-mail for Contact Per	rson:
Location of DER Insta	llation:
Capacity of DER Insta	llation:
2.0 DER LICENSE	NUMBER
3.0 INCIDENTS A	ND ACCIDENTS:
Description of inciden	t/accident 1:
Date and time of incid	lent/accident I:
Description of inciden	t/accident 2:
Date and time of incid	lent/accident 2:
4.0 SIGNATURE	
I herewith confirm that	at the above information is true according to the best of my knowledge.
Name:	
Signature:	
Date:	

ANNEX 7: CALCULATION OF COMPENSATORY CHARGE

The Compensatory Charge (CC) is a charge payable to a utility by a licensee for developing its own captive generation facility within the utility's distribution area, to assist in addressing the effect of the utility's loss of revenue, as a result of the Licensee's full or partial exit from the utility's network. The CC is a percentage of the charge that would have been paid to the utility by the Licensee if the Licensee had depended on the utility for all its energy needs during a given period of time (typically one year). An assumption of 10% is used in the computation. This charge is determined according to the following equation:

$$CC = 0.1(PC*H*\int c)T$$

for an AC generation system.

Where:

CC is the Compensatory Charge (in FRw)

PC is the Plant Capacity (in KW)

H is the period of time (in hours) being considered (typically 8,760hrs.)

Jc is the Capacity Factor of the Plant

T is the prevailing class tariff (in FRw/KWh)

However, in the case of a DC generation system, like the solar system, where the solar panels are rated in DC, the CC will be subject to a sub-system efficiency to convert to AC power and supply the loads, and the CC will be determined according to the following equation:

$$CC = 0.1(PC*SSE*H*\int_c)T$$

Where:

SSE is the Sub-system Efficiency (for the solar system, this includes the efficiency of everything between the Solar Panels and the load (e.g., wiring losses, inverter losses to convert to AC power). This is typically 95% if the battery is not incorporated. If the battery is incorporated, the efficiency will be less.

The Capacity Factor ($\int c$) is the ratio of the actual amount of energy generated by a plant over a period of time (typically one year) to the maximum amount of energy the plant could have generated if it operated at full output, non-stop. This Factor is given by:

$$\int_{C} = \frac{Actual \ Energy \ generated \ in \ one \ year}{Maximum \ output \ of \ the \ plant \ over \ one \ year}$$

This factor is different for different generation technologies. For example:
Average Capacity Factor for Solar generation is
Average Capacity Factor for Diesel generation is
Average Capacity Factor for Mini Hydro generation is
These averages take into consideration all the seasonal variations affecting power generation in the year.
Since the Compensatory Charge is paid on monthly basis, the monthly charge payable is determined by dividing the above CC by 12.

For questions regarding this publication, please contact Bailey Bearss (<u>bbearss@naruc.org</u>) and Erin Hammel (<u>ehammel@naruc.org</u>).

National Association of Regulatory Utility Commissioners (NARUC)

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