LIBERIA ELECTRICITY REGULATORY COMMISSION

ANNUAL REPORT 2021

For the Calendar Year Ending December 2021

Pursuant to Chapter 10 of the Executive Law of 1972

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ACRONYMS AND ABBREVIATIONS

ADR	Alternative Dispute Resolution
AfDB	African Development Bank
BGC	Bulk Generation Charge
BoC	Board of Commissioners of LERC
CLSG	Cote d'Ivoire – Liberia – Sierra Leone – Guinea
DSC	Distribution Service Charge
ECOWAS	Economic Community of West African States
ELL	2015 Electricity Law of Liberia
ELR	Electricity Licensing Regulations, 2020
ERERA	ECOWAS Regional Electricity Regulatory Authority
ERU	Economic Regulation Unit
ESI	Electricity Supply Industry
EU	European Union
GoL	Government of Liberia
HFO	Heavy Fuel Oil
HV	High Voltage
IEC	Information Communication and Education
ICT	Information and Communication Technology
JEP	Jungle Energy Power
KfW	Kreditanstalt für Wiederaufbau
kV	Kilovolts
kWh	Kilowatt hour
LAN	Local Area Network
LEC	Liberia Electricity Corporation
LERC or Commission	Liberia Electricity Regulatory Commission established under the 2015 Electricity Law of Liberia
LACEEP-AF	Liberia Accelerated Electricity Expansion Project – Additional Financing
LLPAU	Legal, Licensing and Public Affairs Unit
LWSC	Liberia Water and Sewer Corporation
LV	Low Voltage
MCA-L	Millennium Challenge Account- Liberia
MCC	Millennium Challenge Corporation
MME	Ministry of Mines and Energy
MW	Megawatt
MVA	Maga Volt-Amp
RIA	Roberts International Airport
TA	Technical Assistance
TEC	Totota Electric Cooperative
TSC	Transmission Service Charge

1.0 MESSAGE FROM THE CHAIRMAN

Pursuant to Chapter 10 of the Executive Law of 1972, it is with great pleasure for me to submit this 2021 Annual Report of the Liberia Electricity Regulatory Commission (LERC). As required by the Executive Law, this report gives an account of all monies received and disbursed; a description of the work done in the year; and recommendations for the more effectual accomplishment of the purposes of the Commission.

Created under the 2015 Electricity Law of Liberia (ELL), LERC is the autonomous regulator of the electricity supply industry (ESI) of Liberia. It oversees the provision of electricity services with clearly defined mandates relative to licensing operators, approving tariffs, establishing, and monitoring compliance with technical codes and commercial operations of the licensees as well as resolving service-related disputes.

The 2015 ELL also specifies the roles of the other key sector agencies in the implementation of aspects of the power sector reforms, including the liberalization of the sector to attract private investment to increase and eventually ensure universal access to electricity. Private capital is essential currently to augment Government of Liberia (GoL) funding of critical electricity infrastructure to reduce poverty and accelerate socio-economic transformation of the nation.

In terms of achievements, LERC made significant progress in 2021 despite numerous challenges such as the closure of the Millennium Challenge Corporation (MCC) Compact, budgetary constraints, and the COVID-19 pandemic amongst others. The MCC Compact, which supported 100% of LERC budget closed on January 20, 2021, thus leaving the Commission in financial stress. The Covid-19 pandemic impacted the smooth operation of LERC as with other institutions across the country. However, with the implementation of LERC's COVID-19 Risk Management Plan, the Commission was able to continue its operations uninterrupted.

LERC's main achievements in 2021 were:

a) Completion of Cost-of-Service Study;
b) Issuance of six licenses to the Liberia Electricity Cooperation;
c) Issuance of small Composite Micro Utility Permit to the Totota Electric Corporative in Bong County;
d) Issuance of Large Micro Utility License to Jungle Energy Power in Nimba County respectively;

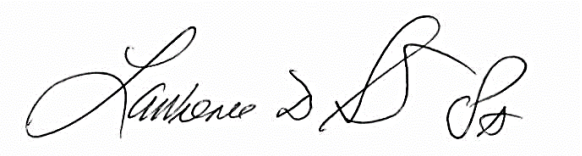
e) Publication of the Tariff Regulations and Multi-Year Tariff Methodology;
f) Distribution Supply Contract Templates
g) Publication of the Customer Service and Quality of Supply Regulations;
h) Publication of Guidelines for Customers Complaints and Dispute Resolution;
i) Drafting of Distribution, Mini-Grid, and Grid Codes for the Electricity Supply Industry of Liberia; and
j) Publication of new electricity tariffs for the Liberia Electricity Corporation, which reduced the current tariffs by an average of 35%.
k) Participation in regional regulatory forums with the ECOWAS Regional Electricity Regulatory Authority (ERERA)

LERC plans for 2022 will include but not limited the following:

- Develop a 5-year strategic plan
- Organize Investors Forum in partnership with key stakeholders
- Set up inspectorate section within the Technical Regulation Unit
- Draft Wiring Code
- Develop framework for regulatory performance and market competition oversight
- Develop communication and public outreach strategy paper
- Finalize the Grid Code, Mini Grid Code, and Distribution Code
- Review and approve tariffs for Jungle Energy Power (JEP)
- Draft regulations for the licensing of electricians and contractors

We acknowledge and wish to express our gratitude for the supplemental financial support provided by the Government of Liberia. It is important to note that sustainable funding for LERC activities remains a critical issue as the MCC Compact that supported 100% of the LERC budget ended in January 2021. Therefore, LERC needs stable funding through regulatory levies and continued supplemental GOL budgetary support as needed.

On behalf of the BoC and management, I would like to thank the Office of the President, the Ministry of Finance and Development Planning, the Ministry of Mines and Energy, Legislature, regulated entities and the consumers for their support and cooperation. Finally, I would like to extend our special thanks to the US Government through the Millennium Challenge Corporation (MCC) for their support, and the European Union (EU) for their ongoing long term technical support.



Lawrence D. Sekajipo, CPA, CFE, DBA, JSM, MBA, MPA
Chairman, Board of Commissioners

2.0 INTRODUCTION

2.1 Background

The Liberia Electricity Regulatory Commission (LERC) was established as the independent electricity industry regulator under the 2015 Electricity Law of Liberia. The law also prescribes the legal and regulatory framework for the sector. LERC oversees the transformation and development of the electricity sector to attract investment, improve availability and adequacy as well as quicken the pace of access to electricity in the liberalized sector. LERC is tasked to ensure the coordinated and accelerated growth and development of the electricity sector in a conducive and competitive environment for sustainability. The mandate of the Commission is to ensure the implementation of the Law by managing the regulatory process to promote investments in generation (large and small facilities, grid connected and off-grid); transmission; and distribution infrastructure.

LERC is governed by a three-member Board of Commissioners (BoC) appointed by the President and headed by a chairperson that provides oversight for the Commission. The role of the Board of Commissioners is to approve regulatory policies and strategic management decisions, as well as provide oversight of LERC operations. A management team, headed by the Managing Director provides operational support to the BoC. The duties of the management team are undertaking research to provide evidence-based recommendations for BoC approval, implementing Board decisions, and providing day to day administrative support for LERC operations

2.2 Functions of LERC

LERC oversees and regulates the following:

- Planning – coordination of plans to ensure adequacy and reliable supply
- Licensing – control entry and exit and effective monitoring of license conditions for the following:
    - Generation, transmission, and distribution of electricity
    - Import and export of electricity
    - Electricity sale
    - Self-supply and Micro Utilities
- Liberalizing and supervising the electricity sector through transparent sector regulation
- Economic regulation – ensuring reasonable rates and allowing only efficient costs in tariffs
- Technical regulation – establishing standards and codes and ensuring open access to transmission networks.
- Quality of service and consumer satisfaction – promoting consumer rights
- Compliance and enforcement – monitoring and enforcing performance targets

- Resolution of service and License related disputes – handling consumer complaints; arbitrating and mediating disputes
- Public awareness – increasing awareness to rights and duties
- Demand side management – promoting efficiency and conservation

2.3 Organizational Goals

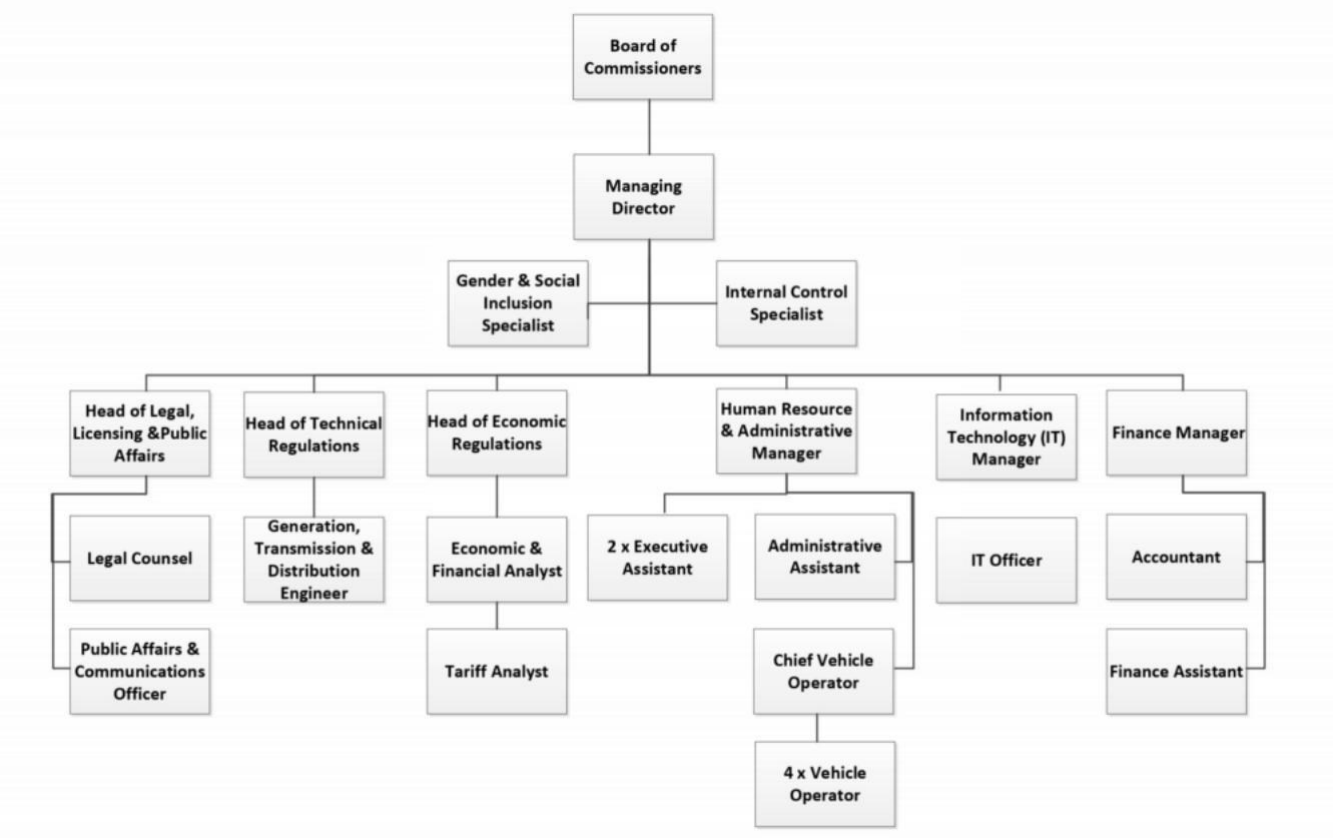
2.3.1 Vision

The vision of LERC is to harness the best talents in the pursuit of an excellent regulator, driven by transparency, accountability, and good governance.

2.3.2 Mission

The mission of LERC is to maintain a conducive electricity regulatory environment, attractive to private sector investment. To accelerate universal access to affordable, reliable, and safe electricity services for consumers in a competitive market, ensuring adequate supply of electricity for sustained economic growth and enhanced quality of life.

2.4 Organizational Structure of LERC



3.0 OVERVIEW OF THE ELECTRICITY SECTOR OF LIBERIA

3.1 Introduction

The performance of the electricity sector of Liberia in 2021 was not satisfactory as significant gaps in generation, transmission and distribution remain a major challenge. Significant first ever achievements with respect to regulations were made in the licensing regime. The LERC issued six (6) licenses to LEC, a Small Composite Micro Utility Permit to Totota Electric Cooperative (TEC) in Bong County, and a Large Micro Utility Distribution License to Jungle Energy Power in Nimba County. Another milestone in 2021 was the announcement and publication of a new set of tariffs for LEC, which reduced the current tariff by an average of 35%.

With regards to power generation, the total grid operational capacity of 112 MW was reduced significantly to 88 MW (60 MW at Mount Coffee Hydro Power Plant and 28 MW at Bushrod Thermal Plant respectively). This reduction in operational capacity at the two plants is due to the failure of one of the four turbines at the Mount Coffee Hydro Power Plant, and failure of two generators at the Bushrod Thermal Plant. These generation challenges were also exacerbated by the seasonal variations resulting in decreased inflow to the Mount Coffee run-off-river scheme and acute demand-side management by the only state-owned electrical power producer, LEC.

Liberia's total imported power generation of 8MW (cross border project), which was expected to increase by additional 27MW in 2021 with the commissioning of the interconnected Cote d'Ivoire, Liberia, Sierra Leone, and Guinea (CLSG) transmission network did not materialize. These power imports and other expected Independent Power Producers' participation will set the basis for addressing future power inadequacies.

3.2 Electricity Planning

The Ministry of Mines and Energy (MME), as the energy sector policy lead, is responsible for national energy and integrated resource planning.

Under section 13.8 of the 2015 ELL, LERC's role is to oversee the planning process of licensees to ensure their long-term plans are responsive to the national energy policy established by the MME. Planning must be undertaken by each licensee and consolidated into an Electricity Supply Plan. Thereafter those plans are expected to be lodged with LERC for approval and implementation coordination. This aspect of the electricity operations has not been realized.

3.3 Electricity Supply

3.3.1 Sources of Electricity Supply

Generation type	Installed capacity	Available capacity
Hydro (LEC)	88 MW Mt. Coffee	60 MW Mt. Coffee
Thermal (LEC)	38 MW HFO thermal plants – Bushrod Island	28 MW HFO thermal plants-Bushrod Island
Solar PV/diesel hybrid (TEC)	140 kW Totota	70 kW

Imports	
Nimba	4MW
Maryland	2MW
Grand Gedeh	2MW

For the period under review, electrical energy production by hydro power generation technology remains the highest contributor to the Liberia electricity supply industry. This is followed by thermal technology and the remainder from power imports and other sources.

Table 1: Regulated Entities Contribution to Liberia Electricity Supply Industry

No	Power Generation Source	Annual Electrical Energy Contribution to ESI (MWh)	Percentage
1	Hydro (LEC)	223,086	76.28
2	Thermal		
	LEC	48,995	16.81
	TEC	161.6	
3	Solar PV (TEC)	22.1	0.01
4	Imports (CIE Cross Border – LEC)	20,210	6.90
Total		**292,474.7**	**100.00**

The generation deficit experienced in 2021 due to reduced operational capacity and ongoing expansion of the transmission and distribution networks make a compelling case for private sector investment of independent power producers (IPPs), the signing of the power purchase agreement (PPA) with CIE and transmission service agreement (TSA) with Transco-CLSG.

3.3.2 Transmission Facilities

The Liberia Interconnected Transmission System currently operated at 66kV spans 128.7 km with an expected increase of 120 km upon the completion of ongoing transmission projects by the second quarter of 2022. In addition to transformer capacities of 70 MVA (11kV/66kV) located at Mount Coffee and 80MVA (22kV/66kV) located at Bushrod Power Generation facilities in 2020, additional transformer capacities of 10 MVA and 40 MVA (both 22kV/66kV) were added in Virginia and

Gardnersville respectively. The regional interconnected 225kV transmission line spanning 537Km including four substations (Yekepa, Buchanan, Mt. Coffee, and Mano) within Liberia, constructed, and operated by Transco CLSG has been completed, energized, commissioned, and awaiting commercial operation. The fifth substation in Botota is still under construction.

3.3.3 Distribution Facilities

LEC operated 466 km of 22kV and 230 km of 33kV distribution lines and an existing transformer capacity of 76MW. Ongoing electricity distribution expansion projects are expected to increase distribution transformer capacity by 134MW. Expansion of the Liberia Interconnected Transmission System is being implemented by several donor funded projects. These projects, which are expected to lead to increased access to electricity of additional 69,000 connections include:

- European Union funded Monrovia Consolidation Project;
- World Bank funded Liberia Accelerated Electricity Expansion Project – Additional Financing (LACEEP-AF), Bomi and Kakata corridors;
- KfW Bank funded Electrification and Grid Upgrade Project; and
- African Development Bank (AfDB) funded Roberts International Airport (RIA) corridor project.

A peak demand of 57 MW was recorded in December 2021.

3.4 Electricity Tariffs

At the time of the promulgation of the first set of regulatory instruments in 2020, the existing LEC tariff was US$0.35/kWh for all categories of customers. This was provisionally approved by LERC in 2020, including social/lifeline tariff of US$0.22/kWh and a special tariff of US$0.25/kWh for the Liberia Water and Sewer Corporation (LWSC) pending a comprehensive tariff review exercise upon the completion of the Tariff Regulations and Multi-Year Methodology. Consistent with the Tariff Regulations and Multi-Year Methodology, LERC received, reviewed, approved, and published LEC tariffs for bulk generation, transmission service and distribution service. The end-user tariff was reduced by an average of 35% and categorized into social/lifeline, residential, non-residential, and medium voltage tariffs.

4.0 KEY ACTIVITIES IN 2021

4.1 Projects

4.1.1 Cost of Service Studies

The Cost-of-Service Study, funded by the MCC Compact was completed in January 2021. The study has assisted LERC in undertaking tariff methodology that includes developing cost-reflective electricity pricing model, thereby enhancing an informed and meaningful tariff regulations and approval processes.

4.2 Legal, Licensing and Public Affairs Unit (LLPAU)

4.2.1 Issuance of Licenses and a Permit

The Legal, Licensing and Public Affairs Unit provides advice to the Managing Director and Commissioners to ensure that the Commission, licensees, and other stakeholders in the electricity supply industry operate in compliance with the provisions of the Electricity Law and other related laws. The Unit provides assistance regarding all matters pertinent to licensing and public affairs in the electricity sector and ensures that electricity regulatory functions and licensing are in accordance with the 2015 Electricity Law of Liberia and applicable regulations.

The LERC issued Licenses to the Liberia Electricity Cooperation (LEC) in Montserrado County, and the Jungle Energy Power (JEP) in Nimba County. The Totota Electric Corporative (TEC) in Totota City, Bong County was issued a Permit.

The LERC licensing regime for electricity allows an entity to engage in more than one regulated activity but must do so under separate licenses. Accordingly, on 9th March 2021, the Commission issued six electricity licenses to LEC in Generation (hydro and thermal plants) Transmission, Distribution, Transmission System Operation, and Import.
The Commission on 11th June 2021 issued a Small Composite Micro Utility Permit to the Totota Electric Cooperative (TEC) to generate and distribute electricity to customers within Totota City, lower Bong County.

In August 2021, the Commission issued Large Micro Utility Distribution License to the Jungle Energy Power (JEP) to operate the cross-border distribution network in Nimba County. JEP was contracted by LEC to manage the distribution network in Nimba County. A Micro Utility is defined as the generation or procurement for the distribution or supply of electricity as an isolated grid or off-grid system up to a capacity of 10MW or serves a customer threshold of up to 20,000 within a single network

4.2.1 Guidelines for Customers Complaints and Dispute Resolution

LERC developed and published Guidelines for Customer Complaints and Disputes Resolution. The guidelines cover existing licensed service providers, and address complaints between distribution licensees and their customers as well as network related disputes amongst licensees. These guidelines would be transformed into a full-scale Dispute Resolution Regulations including a framework for internal procedures within the licensees' structures as the initial point of settlement so that the Commission receives and deals only with disputes that cannot be resolved by the licensees.

4.2.2 Self-suppliers' engagement

In March this year, LLPA in collaboration with the Technical and Economic Regulation Units reached out to electricity self-suppliers captured in the 2019 Electricity Operators Census.

The engagement was in compliance with the 2015 ELL for LERC to facilitate the registration and licensing of electricity operators within various thresholds.

43 letters of invitation were sent out to public and private institutions within Montserrado County; and the engagements were held in March and April 2021.

Table 2: Self-Suppliers Engaged

No.	Institution	Attended	Did not attend
1	Public	3	6
2	Private	7	27
Total		**10**	**33**

Four interactive working sessions were held for electricity suppliers in the Commission's conference room following a presentation on Electricity Self-Supply. Copies of IEC materials (brochure and flyers) were distributed to attendees at the meeting.

In October 2021, the team met with self-suppliers who did not attend the initial engagements. Up to the reporting period, the team visited six institutions within Monrovia that included banks, hotels, businesses (stores) and producers and carried on awareness about the roles, functions, and responsibilities of the Commission.

The team distributed an electricity self-supply questionnaire and provided information on the opportunities available relative to the quality of services available to consumers and gathered first-hand information on challenges faced by business relative to the electricity industry. The survey established that in the face of the current unreliability of grid supply and the economic constraints emanating from the effect of Covid-19 pandemic, the imposition of the self-supply fee was deemed unreasonable. Hence the BoC suspended the fee payment for a period of one year.

4.2.3 Public Relations and Communication

In September 2021, the Chairman, Dr. Lawrence D. Sekajipo, Commissioner Michael Korkpor and Managing Director Augustus V. Goanue held a press conference at the Commission's headquarters on the work of the Commission and the evolving progress in the electricity sector.

The BoC informed the media, stakeholders and public about the progress and achievements within the almost two years of operation as an autonomous Commission.

Following the press conference, the Commission hosted a one-day media engagement and workshop on Liberia Electricity Sector Regulatory Framework. The workshop was intended to create awareness and inform journalists of the Commission's operating framework and provide information on the current state of the sector.

The media engagement was attended by 25 representatives from both print and electronic media and the Press Union of Liberia. The engagement deepened the journalists' understanding of the Commission's role in improving the Liberian electricity sector.

4.2.4 Board Resolutions and Notices

The BoC makes regulatory decisions by resolutions and issues notices which must be formally communicated through publication.

During the reporting period, the LLPA on behalf of the Commission published several BoC resolutions and public notices. The BoC resolutions included approvals of the Electricity Tariff Regulations and Multi Year Tariff Methodology, a Small Composite Micro Utility Permit for Totota Electric Cooperative in Bong County, License for Jungle Energy Power (JEP) in Nimba County and Fine Against LEC for Noncompliance.

Notices included: Call for the registration of electricity self-suppliers, Public of Pendency of Application for A Permit for TEC, JEP Application for License Form, notification to the public on LEC's application for the Review of Electricity Tariffs and abridged application for public comment and public hearing.

4.3 Economic Regulation Unit (ERU)

The Economic Regulation Unit is responsible for developing and implementing broad economic and financial policies and methods for the determination of optimal electricity pricing and the evaluation of the prudence of the costs of operators and the financial viability of those operators. Over the one-year period from January to December 2021, the ERU achieved the following:

4.3.1 Cost-of-Service Study

The Cost-of-Service Study, funded by the MCC Compact was completed in January 2021. The study has assisted LERC in undertaking tariff methodology that includes developing cost-reflective electricity pricing model, thereby enhancing an informed and meaningful tariff regulations and approval processes.

4.3.2 Tariff Regulation and Multi-Year Tariff Methodology

The Tariff Regulation and the Multi-Year Tariff Methodology, two documents instrumental to the provision of quality, reliable, and affordable power supply through their derivation of the efficient cost structure and tariff of operators were completed and published.

4.3.3 LEC Tariff Application

Consistent with the Tariff Regulation and the Multi-Year Tariff Methodology, LERC received application for tariff from the Liberia Electricity Corporation (LEC) to approve tariffs chargeable for services provided customers. This is the first time in post-war Liberia that an Electricity Tariff was requested based on the cost of providing

electricity. In the application submitted, LEC proposed to reduce the tariff from 35 cents per kWh to 30 cents per kWh (14.3% reduction) for residential customers and to 27 cents per kWh (22.9% reduction) for commercial customers. Medium Voltage customers tariff submitted is 25 cents per kWh (28.6% reduction).

4.3.4 LEC Tariff Review Process

The LERC, on 12th November 2021 achieved a major milestone in its operations by conducting its first public hearing on the LEC tariff application as part of the tariff review process. The public hearing brought together stakeholders in the sector to comment on the application of LEC. The tariff review process was completed on December 10, 2021, with the formal announcement of the approved tariff by the BoC of LERC, which took effect on January 1, 2022.

Table 3: Bulk Generation, Transmission, and Distribution Service Charges

Item	US$/kWh
Bulk Generation Charges (BGC)	US$0.1409/kWh
Transmission Service Charge (TSC)	US$0.0193/kWh
Distribution Service Charge (DSC)	US$0.0167/kWh

Table 4: LEC's End-User Tariffs Approved by LERC BoC

TARIFF CATEGORY	END-USER TARIFF
SOCIAL	
Tariff	US$0.1500/kWh
Fixed Charge	N/A*
RESIDENTIAL	
PREPAID	
Fixed Charge	US$2.4800/Month
Energy Charge	US$0.2400/kWh
POSTPAID	
Fixed Charge	US$4.4700/Month
Energy Charge	US$0.2400/kWh
NON-RESIDENTIAL	
PREPAID	
Fixed Charge	US$10.0000/Month
Energy Charge	US$0.2200/kWh
POSTPAID	
Fixed Charge	US$12.0000/Month
Energy Charge	US$0.2200/kWh
MEDIUM VOLTAGE	
Fixed Charge	US$50.00/Month
Energy Charge	US$0.1900/kWh

4.4 Technical Regulation Unit (TRU)

The technical Regulation Unit advises the Managing Director and Commissioners on all regulatory issues relating to the technical performance of the electricity supply industry, including setting performance targets for licenses, monitoring and enforcing licensee's technical and environmental compliance consistent with the 2015 ELL, regulations and licensing terms and conditions. The unit also provides support to the Legal, Licensing and Public Affairs Unit in the evaluation of license applications.

4.4.1 Customer Service and Quality of Supply Regulations

The Regulations on Customer Service and Quality of Supply was approved and published on August 18, 2021. Key principles of the regulations, which apply to licensed and permitted service providers engaged in electricity distribution or sale services, customers, affiliates customers or prospective customers are:

a) Establishing the framework for delivery of safe, adequate, dependable, and non-discriminatory service by service providers.
b) Specifying the rules governing the technical parameters and commercial relations between the service provider and a customer or a prospective customer; and
c) Prescribing performance benchmarks for electricity supply.

4.4.2 Distribution and Mini-Grid Codes

The Electricity Distribution Code of Liberia containing the guidelines and conditions that a distribution licensee must meet in carrying out its obligations to distribute electricity under its license has been drafted. Similarly, the Electricity Mini-Grid Code of Liberia has also been drafted to guide the operations of mini-grid electricity service providers. The Mini Grid-Code provides technical and safety guidance for the development and operation of mini grids in the Republic of Liberia. Both draft Codes have received stakeholders' comments and are expected to be revised for validation by stakeholders and approved by the Board of Commissioners by the second quarter of 2022.

4.4.3 Grid Code

The Liberia Electricity Grid Code, which is the harmonized and standardized technical document for the development, operation, maintenance, and use of the Liberian Interconnected Transmission System has also been drafted. It also provides the rules and criteria addressing governance, planning, connection, operations of the interconnected transmission system, the standards of performance, metering as well as information and data exchange among participants engaged in that segment of the electricity supply industry. The Grid Code contains provisions that facilitate transiting from the current state of operations to a new regime of the standards required under the Code. Stakeholders' comments on the draft Grid Code are expected in the second quarter of 2022.

4.4.4 Distribution Supply Contract Templates

Regulations require distribution service providers to prepare and sign contracts with their customers. To assist distribution licensees in meeting this requirement, templates for High Voltage (HV) and Low Voltage (LV) distribution supply have been prepared to guide the contractual obligations of distribution licensees and their customers. The minimum requirements under such contracts are outlined in the Licensing Regulations. The templates are intended to ensure uniformity in the distribution contracts being employed and to save the distribution licensees the costs of developing the contracts.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

LERC, upon relocation to the Congo Town offices in January 2021, installed new Information and Communication Technology (ICT) network infrastructure to support the computer systems and services critical to the functions of the Commission. This included cabling, termination, and channeling of CAT7 cables, wall sockets and mounts, racks and supporting paneling, including configuration, and testing of Local Areas Network (LAN) and Voice Over Internet Protocol (VOIP) services. The ICT network infrastructure has significantly enhanced LERC's efficiency, including digital and online services to the public.

6.0 HUMAN RESOURCE AND ADMINISTRATION

6.1 Responsibilities

The Commission strives to provide a conducive work environment, hold staff accountable and assist in career development, whilst complying with the Decent Work Act 2015, National Code of Conduct and operate its program consistent with international best practices.

The Human Resource and Administrative Unit is responsible for planning, directing, and coordinating human resource management activities of the Commission, to maximize the strategic use of human resources and maintain functions such as employee compensation, recruitment, personnel policies, and regulatory compliance. This Unit also handles administration and related activities.

6.2 A key accomplishment

A key accomplishment in 2021 was the completion and rollout of the Staff Handbook. The Staff Handbook provides information on the conditions of work in the conduct of business and personal affairs at the LERC. The handbook provides guidance to staff to make good judgement and maintain a respectable character and integrity during the discharge of their duties. It also describes staff's responsibilities and outlines the programs developed by the LERC to benefit staff and provide a work environment that is conducive to both personal and professional growth.

The handbook is part of a continuing effort to ensure that all staff are informed about their responsibilities at work.

6.3 Transfer of Assets

The Millennium Challenge Account Liberia (MCA-L) at the end of Compact in May 2021, transfered assets worth approximately US$326,122.28 to the LERC. Assets received included computers and IT equipment, office equipment and furniture.

7.0 Training Workshops and Capacity Building

7.1 International working group meetings and workshops

Two LLPA staff in September 2021 participated in a meeting and a specialized training on the electricity market in Accra and Akosombo, Ghana respectively.

The head of the LLPA Unit, Cllr. Minnie Paegar-Kallon represented the Commission at the legal and licensing working group meeting, which was held from 27th – 28th September in Accra, Ghana. The purpose of the meeting was to review results from information collected on the harmonization of criteria for granting license to participate in the regional electricity market.

LERC's Public Affairs and Communication Officer Crispin Tulay participated in a four-day intensive workshop on the Fundamentals of Regulation and Introduction to the ECOWAS Regional Electricity Market for communication specialists from the electricity regulatory bodies within the West African region. The workshop was held from 29th September to 2nd October in Akosombo, the eastern region of Ghana.

The forum was organized by the ECOWAS Regional Electricity Regulatory Authority (ERERA).

7.2 In-house training

Long-Term Technical Experts, funded by the European Union under the project Technical Assistance to the Liberia Electricity Regulatory Commission (LERC) and Ministry of Mines & Energy (MME), provided on the job training for LERC technical staff using the learning-by-doing method. The training in 2021 covered:

a. licensing, including monitoring the terms and conditions of licenses
b. technical regulations with emphasis on technical standards and the development of various codes
c. tariff regulations, methodology, analysis, development of tariff models, and format for public hearing on tariff applications
d. Dispute handling procedure and Alternative Dispute Resolution (ADR) procedure

8.0 FINANCE

8.1 Responsibilities

The Finance Unit oversees the financial management of the Commission. Key functions include managing the day-to-day financial operations of the Commission, such as payroll, invoicing, budgeting, and accounting policies and compliance and other finance related transactions. A key accomplishment of the Finance Unit was the completion and BoC approval of the Financial Management Policies and Procedures Manual.

8.2 Funding and Support for LERC Activities

The 2015 ELL requires that the primary source of financing for LERC shall be through levy or surcharge on electricity produced and consumed as a pass-through expense to consumers. However, this has not been feasible due to financial underperformance of the electricity sector and the lack of cost reflective tariff regime. Following the announcement of new set of cost reflective tariffs in December 2021, the regulatory levy took effect on January 1, 2022. In the meantime, the Government of Liberia is providing supplementary budgetary support to the LERC until the Commission can fully fund its budget through regulatory levy and other related fees consistent with the 2015 ELL.

8.3 Donor Support

The European Union (EU) continues to fund a Technical Assistance (TA) program which provides LERC with three highly skilled consultants through December 2022. The expertise of these consultants is critical to the development and implementation of regulatory instruments, including those relating to the Licensing Package, Tariff Regulations and Methodology, Technical Standards, including the Grid, Distribution and Wiring Codes, as well as other functions of LERC.

8.4 SUMMARY OF INCOME/REVENUE AND EXPENDITURE

Summary of Income/Revenue and Expenditure For the Year Ended December 31, 2021	
Income/Revenue	
Source	**Amount (US$)**
LERC Application and License Fees	232,625.00
GOL Subsidy/Budgetary Support	570,723.23
Total Revenue/Income	***803,348.23***
Expenditure	
Personnel	821,679.21
Goods and Services	192,343.13
Total Expenditure	***1,014,022.34***
Deficit	**(210,006.48)**

9.0 ACTIVITIES PLANNED FOR 2022

Activities scheduled for 2022 include but not limited to the following:

9.1 Development of a 5-year strategic plan

The LERC intends to develop a five-year Strategy (2022-2026) that will clearly define the Commission's mission, vision, core values and strategic objectives based on where we are, where we want to go, and how we will get there over the next five years. The strategic plan will take into consideration stakeholders and relevant documents such as the 2015 Electricity Law of Liberia, existing, ongoing, and planned regulations and codes.

9.2 Setting up inspectorate division within the Technical Regulation Unit

With the development and setting up of technical standards and codes, the LERC intends to set up an inspectorate desk at the Technical Regulation Unite to undertake technical audits and inspections to verify compliance with codes and standards, as well as license/permit terms and conditions. The inspectorate will also provide support to developing framework for testing, certification, and licensing of electrical technicians and contractors.

9.3 Drafting of Wiring Code

The LERC will draft wiring code(s) to serve as the standards for internal wiring of premises in readiness for receiving electricity supply.

9.4 Development of communication and public outreach strategy paper

Public forums are a means of achieving several publicity objectives. LERC will develop a communication strategy that will balance the interfacing of regulatory function with customer and public expectations. Among activities to be undertaken are:

- Identifying stakeholders and developing a communication strategy for outreach and constant public consultation and engagement
- Utilizing electronic media including the website and social media options for disseminating important information
- The publication and communication of important regulatory decisions and key regulations to the various segments of the public.

9.5 Finalization of the Grid Code, Mini Grid Code, and Distribution Code

The Grid Code, Mini Grid Code and Distribution Code are expected to be finalized in 2022. The final Grid Code will lead to a new regime of the standards required for transiting from the current state of operations. The Mini Grid-Code provides technical and safety guidance for the development and operation of mini grids in the Republic of Liberia. These codes will also be the standards for internal wiring of premises in readiness for receiving electricity supply.

9.6 Review and approval tariffs JEP

Now that the LERC has published and rolled out the Tariff Regulations and Tariff Methodology for the electricity sector, the Commission will request a formal tariff application from JEP for review to determine its revenue requirements and appropriate tariff structures for end-users, consistent with the 2015 ELL and the Tariff Regulations and Methodology.

9.7 Participation in Electricity Investors' Forum

The LERC intends to participate in the proposed Electricity Sector Investors' Forum to be organized by key stakeholders of the sector. The forum, which seeks to bring together Liberian entrepreneurs, potential investors (national and international), donors and development partners to invest in the electricity sector will be a platform for attracting investment in the electricity sector.

9.8.1 Study Tours to Regulatory Commissions in ECOWAS and Other African Regions

Study tours to other regulatory agencies in the region are an important capacity building strategy. Accordingly, LERC plans to undertake a study tour of other regulatory authorities in the ECOWAS sub-region and other African countries to learn lessons from their experiences and facilitate networking. Tours of electricity supply industries in these regions will supplement other forms of training for LERC Commissioners and staff to effectively deliver on the Commission's mandates.

10.0 Challenges and Risks

As a nascent regulator, LERC is confronted with the following challenges and risks:

1. Inadequate funding of LERC's budget is a risk to its efficiency, independence, and sustainability.
2. Training and capacity building
3. Potential political interference and undue influence in regulatory affairs leading to poor regulatory governance, substance, and outcome.
4. Inability to retain qualified, experienced, and reliable staff