



**LIBERIA ELECTRICITY REGULATORY COMMISSION
ANNUAL REPORT 2020**

**For the Calendar Year Ending December 2020
Pursuant to Chapter 10 of the Executive Law of 1972**



CONTENTS

ACRONYMS AND ABBREVIATIONS	4
5	
1.0 MESSAGE FROM THE CHAIRMAN	5
2.0 INTRODUCTION	7
2.1 Background.....	7
2.2 Functions of LERC	7
2.3 Organizational Goals	7
2.3.1 Vision	7
2.3.2 Mission	7
2.4 Organizational Structure of LERC.....	8
3.0 OVERVIEW OF THE ELECTRICITY SECTOR OF LIBERIA	9
3.1 Introduction.....	9
3.2 Electricity Planning.....	9
3.3 Electricity Supply	9
3.3.2 Transmission Facilities	9
3.3.3 Distribution Facilities	10
3.4 Electricity Tariffs	10
4.0 ACTIVITIES REPORT	10
4.1 Office of the Managing Director	10
4.1.1 Administrative Affairs	10
4.1.2 Recruitment.....	10
4.1.3 Training.....	11
4.1.4 FIDIC Suit of Services Agreements.....	11
4.1.5 Comprehensive Regulatory Impact Analysis	11
4.2.1 Cost of Service Studies.....	11
4.2.2 Regulatory Information Management Systems (RIMS) Consultancy.....	12
4.3 Legal, Licensing and Public Affairs Unit.....	12
4.3.1 License Applications.....	12
4.3.2 LEC license application.....	12
4.3.3 Licensing Jungle Energy Power (JEP).....	13
4.3.4 Communication and Public Education Desk	13
4.4 Economic Regulation Unit	13
4.4.1 Tariff Regulations and Methodology	13
4.5 Technical Regulation Unit.....	13
5.0 WORK PLAN FOR 2021	14
5.1 Licensing Activities	14
5.1.1 Licensing LEC Operations.....	14
5.1.2 Licensing of Micro Utility Operators	14
5.2 Tariff Matters.....	14
5.2.1 Tariff Regulations Approval by BOC	14
5.2.2 Approval of long term LEC and JEP Tariffs	14
5.2.3 Approval of Small Networks Tariff	14
5.2.4 Cost of Service Study	14

5.3 Technical Standards for Performance Monitoring	15
5.3.1 Distribution Code	15
5.3.2 Grid Code	15
5.3.3 Customer Service and Quality of Supply Regulations	15
5.3.4 Wiring Code	15
5.4 Indices for Distribution Supply Contracts	16
5.4.1 Distribution supply contract template	16
5.5 Dispute Resolution	16
6.5.1 Propose customer charters for licensees	16
5.5.2 Draft Dispute Resolution Regulations	16
5.5.3 Reporting formats for monitoring dispute handling by licensees	16
5.6 Training Workshops and Capacity Building	16
5.6.1 Licensing	16
5.6.2 Tariffs 16	
5.6.3 Technical Regulation	16
5.6.4 Dispute Handling Procedure	17
5.6.5 Study Tours to Regulatory Commissions in ECOWAS Region	17
5.7 Communication and Outreach	17
5.7.1 Public Outreach on LERC Activities	17
5.7.2 Public Communication on Initialization of Licensing	17
5.7.3 Public Communication on Initialization of Tariff Setting	17
5.8 Participation in Electricity Sector Investment Forum	17
5.8.1 Preparation of outreach material for Forum	17
6.0 FUNDING AND SUPPORT FOR LERC ACTIVITIES	17
7.0 THE NEED FOR GOVERNMENT AND DONOR INTERVENTION	18

ACRONYMS AND ABBREVIATIONS

ADR	Alternative Dispute Resolution
BoC	Board of Commissioners of LERC
ELL	2015 Electricity Law of Liberia
ELR	Electricity Licensing Regulations, 2020
ESI	Electricity Supply Industry
EU	European Union
GGLL	Gigawatt Global Liberia Limited
GoL	Government of Liberia
JEP	Jungle Energy Power
LEC	Liberia Electricity Corporation
LERC or Commission	Liberia Electricity Regulatory Commission established under the 2015 Electricity Law of Liberia
LITS	Liberia Interconnected Transmission System
LLPAU	Legal, Licensing and Public Affairs Unit
LTTA	Long Term Technical Assistance
MCA-L	Millennium Challenge Account- Liberia
MCC	Millennium Challenge Corporation
MME	Ministry of Mines and Energy
MULR	Micro Utility Licensing Regulations (MULR)
NAO	National Authorizing Office of the Ministry of Finance
PPA	Power Purchase Agreement
RREA	Rural Renewable Energy Agency
TRU	Technical Regulation Unit
TSO	Transmission System Operator

1.0 MESSAGE FROM THE CHAIRMAN

I am pleased to submit the 2020 Annual Report of the Liberia Electricity Regulatory Commission (LERC) in accordance with Chapter 10 of the Executive Law, 1972. As the Executive Law requires, the 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 in the country with clearly defined mandates in relation 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 at this time 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, the year 2020 may be described as a qualified success despite the COVID-19 pandemic. The outbreak of the Covid-19 pandemic and precautionary measures instituted by the GoL disrupted the smooth operation of LERC at the onset. However, with the institution of LERC's COVID-19 Risk Management Plan, the Commission was able to continue its operations. The main achievements were the recruitment of core staff, development and launch of the Commission's website, and the issuance of three regulatory instruments.

Utility regulation requires high and often multi-functional skills. Qualified regulatory expertise is both rare and expensive. In furtherance of the Commission's recruitment policy which aims to hire, train, and retain critical professional staff, LERC embarked on a sustained recruitment drive during the year. The exercise was based on rigorous selection criteria as well as comprehensive interviews conducted within the procurement process of Millennium Challenge Account –Liberia (MCA-L). The recruitment exercise was effective and highly successful. By December 2020, all the department heads and other core professional staff had been recruited.

The regulatory instruments, which were extensively discussed and validated by stakeholders, were approved by the Board of Commissioners (BoC) in 2020. The instruments are:

- The Electricity Licensing Regulations, 2020 (ELR) - for the licensing of operators within the Liberia Interconnected Grid system;
- The Micro Utility Licensing Regulations, 2020 (MULR) - for licensing mini-grid and off-grid systems under a simplified regime; and
- Electricity Licensing Handbook, 2020 (ELH) - a guide for assisting applicants in the application process.

Consistent with the requirement to hold licenses for various activities under ELL and pursuant to the ELR, Liberia Electricity Corporation (LEC), applied for six separate licenses covering its operations; namely two generation licenses for hydro power and thermal power plants, transmission license, transmission system operations license, distribution license, and import license. Additionally, license applications were received from Gigawatt Global Liberia Limited for the generation of a 20 MW of Solar PV. LERC also received and reviewed a Power Purchase Agreement (PPA) between Liberty Renewables and the Liberia Airport Authority (LAA) for the development of a 5 MW solar PV plant to supply the Roberts International Airport (RIA). The LERC team informed LAA of the appropriate steps to be taken in procuring a power plant.

The Government of the United States through Millennium Challenge Corporation (MCC)/MCA-L and European Union (EU) have been supporting the standing-up of LERC since its establishment. MCC, through MCA-L, has covered the entire budget of LERC from the inception to date. This includes the office lease, salaries, procurement of vehicles, IT equipment, office supplies, regulatory training, and procurement of consultant services. The EU is providing long-term technical assistance to LERC in the areas of legal, economic, and technical regulations. This entails the assignment of four full-time consultants, three of whom are embedded in LERC and the fourth is assisting the Ministry of Mines and Energy (MME) on policy issues.

The outlook for 2021 will include the completion of LEC and JEP license applications and issuance. We plan to complete the Cost-of-Service study; finalize and publish the Tariff Regulations and Methodology, as well as the Customer Service and Quality of Supply Regulations. Other key activities to be undertaken in 2021 include the development of technical standards for monitoring licensees' performance; the preparation of Complaint and Dispute Resolution Guidelines; development of distribution, grid, and wiring codes; development of indices for distribution supply contracts and templates; and facilitating training workshops, study tours, as well as publicity and outreach.

Finally, it is important to note that sustainable funding for LERC activities remains a critical issue as the MCC Compact that supports 100% of the LERC budget expires in January 2021. Therefore, LERC needs stable funding through regulatory levy and supplemental GOL budgetary support to operate as an independent and credible regulator in accordance with the 2015 ELL. Funding challenges could create difficulty in recruiting and retaining trained, qualified, experienced, and reliable staff. Investments in LERC are unlikely to achieve the intended objectives of transforming the electricity sector without sustainable funding.



Lawrence D. Sekajipo, CPA, CFE, CVA, DBA, JSM
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 is overseeing 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 for promoting investments in generation for (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. A management team, headed by the Managing Director provides operational support to the BoC.

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
- Liberalize and supervise the electricity sector through transparent sector regulation
- Economic regulation – ensure reasonable rates and allow only efficient costs in tariffs
- Technical regulation – establish standards and codes and ensure open access to transmission networks.
- Quality of service and consumer satisfaction – promote consumer rights
- Compliance and enforcement – monitor and enforce performance targets
- Resolution of service and License related disputes – handle consumer complaints; arbitrate and mediate disputes
- Public awareness – increased awareness to rights and duties
- Demand side management – promote efficiency and conservation
- Generation, transmission, and distribution of electricity
- Import and export of electricity
- Electricity sale
- Self-supply and Micro Utilities

2.3 Organizational Goals

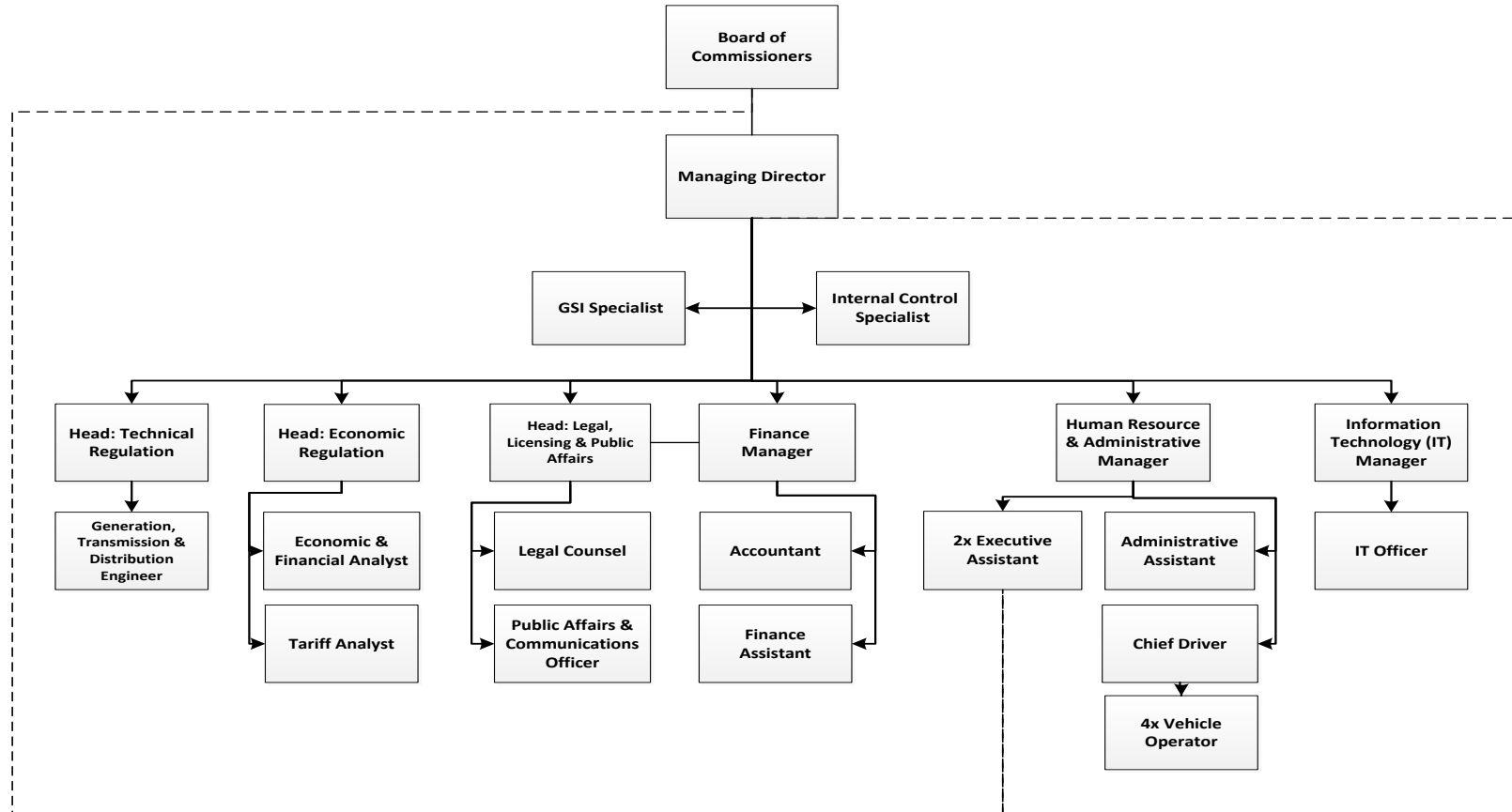
2.3.1 Vision

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 2020 can be described as mixed. Significant first ever achievements were made with the commencement of the licensing processes of regulated activities starting with the LEC. Reliable transmission and distribution capacity continues to be a challenge for the sector.

With regards to power generation, the total grid installed capacity was 126 MW. Due to seasonal variations and expected decreased inflow to the Mount Coffee run off river scheme, grid power demand outweighed generation supply implemented by the only state-owned producer, LEC, resulting in wide-scale load shedding on the Liberia Electricity distribution system.

Liberia's total imported power generation of 8MW (cross border project) is expected to increase in 2021 with the commissioning of the interconnected Cote d'Ivoire, Liberia, Sierra Leone, and Guinea (CLSG) transmission network enabling the importation of an initial 27 MW to the National Grid with the possibility of moving up to 88 MW. This intervention and other expected Independent Power Producers' participation will set the basis for addressing future power inadequacies.

3.2 Electricity Planning

National energy planning and integrated resource planning is undertaken by the Ministry of Mines and Energy as the energy sector policy lead.

Under section 13.8 of the 2015 ELL, LERC 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 will be lodged with LERC for approval and implementation coordination. This aspect of the electricity operations is yet to be realized.

3.3 Electricity Supply

3.3.1 Sources of Electricity Supply (LEC)

Generation type	Installed capacity	Available capacity
Hydro	88 MW Mt. Coffee	80 MW Mt. Coffee
Thermal	38 MW HFO thermal plants – Bushrod Island	32MW HFO thermal plants- Bushrod Island
Imports		
Nimba	4MW	
Maryland	2MW	
Grand Gedeh	2MW	

3.3.2 Transmission Facilities

The Liberia Interconnected Transmission system currently operated at 66kV spans 122.9 km with an expected increase of 125.7 km upon the completion of ongoing transmission projects by the first quarter

of 2022. Transformer capacities of 70 MVA (11kV/66kV) located at Mount Coffee and 80MVA (22kV/66kV) located at Bushrod Power Generation facilities, respectively, exist. The regional interconnected 225KV operated transmission line spanning 537Km within Liberia implemented by Transco CLSG is well advanced in implementation and by the first quarter of 2021 commissioning and commercial operation of the Man (Cote d'Ivoire) to Mt. Coffee (Liberia) section is expected to begin.

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 projects namely the European Union funded Monrovia Consolidation Project, World Bank funded Liberia Accelerated Electricity Expansion Project Additional Financing (LACEEP-AF) Bomi and Kakata corridors respectively, and the African Development Bank (AfDB) RIA corridor project leading to access to electricity of additional 69,000 connections.

3.4 Electricity Tariffs

At the time of the formalization of LERC in 2018 the existing tariff was US\$.35/kWh for all categories of customers. This was provisionally approved by LERC pending its comprehensive tariff review exercise under its Tariff Regulations and Methodology. Additional electricity tariff approved on 21st September 2020 are as follows:

Social/lifeline tariff	US\$0.22/kWh
Special tariff/ LWSC	US\$0.25/kWh

4.0 ACTIVITIES REPORT

4.1 Office of the Managing Director

4.1.1 Administrative Affairs

The Management and Administrative Support Unit is leading in establishing the systems and procedures necessary for the effective operation of LERC. This unit is responsive to both the internal human resource and administrative needs of the Commission while positioning the Commission to handle the needs of their external clients and fulfil its mandates under the 2015 ELL.

4.1.2 Recruitment

Recognizing the importance of human resources to fulfilling LERC's regulatory mandate, the Commission continued its intensive recruitment exercise in 2020. The exercise which led to the hiring of some of the best professionals in Liberia, was enhanced by the utilization of the rigorous selection criteria and interview panels established by LERC with assistance from MCA-L.

As of December 2020, LERC could boast of having in place the full complement of its core and support staff.

The staffing level is depicted on the LERC organizational chart in section 2 and may be summarized by category as follows:

Position	No
1. Chairperson & Commissioners	3
2. Managing Director	1
3. Directors/Heads of Units	3
4. Managers	3
5. Senior Staff/Specialists	3
6. Officers	2
7. Executive Assistants & Secretarial	2
8. Support	3

4.1.3 Training

Training in regulation and related fields is an important aspect of building the capacity of staff devoted to regulation. The following training programs were undertaken in the reporting year:

4.1.4 FIDIC Suit of Services Agreements

This training was undertaken in the second quarter. Due to the COVID-19 Pandemic, Commissioner Michael P. Korkpor; the Head of Legal, Licensing & Public Affairs, Minnie Paegar-Kallon and the Legal Counsel, Jeddi M. Armah, were enrolled into an eight-week online course (The FIDIC Suite of Services Agreement).

4.1.5 Comprehensive Regulatory Impact Analysis

In the third quarter, LERC partnered with the Public Utility Research Center (PURC) of the University of Florida to provide a six-week intensive online course for eight staff of the Commission, including the Board of Commissioners. The course was titled “Comprehensive Regulatory Impact Analysis”.

To give all employees an insight of the technical jargons in electricity regulation and make them feel a part of the electricity sector, LERC partnered with EUCI to provide a two-day intensive course for its non-engineer staffers. The LERC enrolled 11 staff into the “Introduction to Electric Utility Systems for Non-Engineers” online course.

The costs of all training were borne by MCA-L under the MCC Compact.

4.2 Reports and Projects

4.2.1 Cost of Service Studies

In March 2020, MCA-L engaged Tetra Tech ES, Inc. to provide consulting services for ‘Electricity Cost of Service Study and the Development of a Cost Reflective Electricity Pricing Model for LERC’.

The objectives of the study were:

- To determine the actual and efficient costs of supply of electricity by LEC and other operators
- To develop a model for use by LERC during tariff approvals processes
- To recommend Regulatory Accounting Guidelines based on a Regulatory Accounting System
- To develop a Comprehensive Strategy for transiting to cost reflective electricity tariffs

The execution of the assignment was also interrupted by the Covid-19 pandemic. The field work could not be conducted according to schedule and necessitated the deferment of completion from October to December 2020 and eventually into 2021.

4.2.2 Regulatory Information Management Systems (RIMS) Consultancy

The RIMS Project funded by MCC through MCA-L was designed to automate internal processes and streamline the process of data collection from the regulated entities through an appropriate regulatory information management system. The system is to ensure that data collected is reliable, timely and in a consistent format thereby ensuring meaningful analyses to reduce the incidence of discrepancies and information asymmetry between the regulator and licensees.

The project was in two parts and required the inputs of two separate experts. The first part involved the development of various kinds of specifications based on an assessment of the needs of LERC and the system design document. This would be utilized under the second part of the assignment that involves the Software Development, Customization, Configuration, Trial and Roll-out of the software.

Based on the ToR prepared for engaging experts to undertake the assignment, Oumar Ndiaye, an individual consultant was employed to perform the first part of the assignment and as well as support LERC during the software development phase.

Despite the time and effort that had been expended on this project and the expected benefits from its deployment, the project was truncated. The IT expert had completed the specifications and prepared the ToR for engaging the software developer when the process was discontinued by MCC/MCA-L due to the fast-approaching Compact closure deadline of January 20,2021.

4.3 Legal, Licensing and Public Affairs Unit

4.3.1 License Applications

On May 29, 2020 Gigawatt Global Liberia Limited submitted an application and started discussions for reviving and pioneering a proposed 20MW solar PV power plant. The application fell short of the attachments required under the ELR. The Legal, Licensing and Public Affairs Unit (LLPAU) provided guidance to the promoters of the project on how to meet those requirements, absent which the license application was deemed incomplete.

4.3.2 LEC license application

According to Section 9.2, LEC is subject to regulation under the 2015 ELL. In addition to the power generation and distribution activities under Section 9.3, LEC is also designated as the Transmission System Operator and Grid Company. Accordingly, the corporation submitted the following applications for licenses:

- Application for generation license:
 - To operate the existing 88 MW Hydro Power Plant at Mount Coffee and supply electricity to the Liberia interconnected transmission network and distribution network; and
 - To operate the existing 38 MW thermal plants situated at Bushrod Island, Monrovia and supply electricity to the Liberia interconnected transmission network and distribution network.

- Transmission – to design, construct, operate and maintain the Liberia Interconnected Transmission System (LITS) consisting of 123km of 66kV power lines and the associated facilities and equipment for the transmission of electricity throughout the country as the designated National Grid Company under section 9.3 of the 2015 ELL.
- Distribution – to construct, operate and maintain the low voltage networks currently consisting of 22kV and 33kV power lines to distribute and sell electricity without discrimination to customers within Liberia.
- Transmission System Operation – for the independent and exclusive operation (coordination and control of flow of power & energy) of Liberia's Interconnected Transmission System (LITS);
- Import – for importing electricity through existing cross border lines for sale.

4.3.3 Licensing Jungle Energy Power (JEP)

Under an agreement with LEC, JEP was appointed as the operator of the distribution network in Nimba County with supplies from one of three distribution level imports from Cote d'Ivoire. LERC has stated clearly to LEC the grantor and JEP the operator that JEP needs a distribution operator's license to continue its operations. This had not occurred as of the end of 2020. Indications are that JEP is readying itself to submit the application as required by legislation.

4.3.4 Communication and Public Education Desk

The Communications desk prepared and successfully launched the LERC website and has duly hosted the approved ELR, MULR, Licensing Handbook and other useful LERC information.

This desk has also produced some informative desk top publications such as brochures, fliers, and stickers.

4.4 Economic Regulation Unit

4.4.1 Tariff Regulations and Methodology

The Tariff Regulations and Methodology defined the framework for approval of rates and charges for services provided by licensees. These were prepared in the first half of the year and made available to stakeholders for their inputs in October 2020. Both instruments were then finalized taking the stakeholders' contributions into consideration and presented to the BoC in November. The related completion report that incorporated BoC comments and observations was finalized in December 2020.

LERC adopted the use of the long-run marginal cost and a cost-plus method as the basis for the tariff model undergoing development.

4.5 Technical Regulation Unit

In addition to data collection and general technical support to the Commission's work, the Technical Regulation Unit (TRU) functioned in three focal areas.

The unit provided technical support to the LLPAU in the evaluation of all the license applications; developed technical benchmarks to support on-going draft **Grid Code** for the operation of the LITS and the **Distribution Code** for the operation of distribution systems; and linked to the support given in the preparation of the technical codes. The unit also provided technical support to the preparation of the **Draft Customer Service and Quality of Supply Regulations** which is being established to guide LERC in monitoring quality of service of licensees.

5.0 WORK PLAN FOR 2021

5.1 Licensing Activities

The activities to be undertaken in 2021 include licensing the existing operations of LEC, JEP and other smaller operators. The LLPAU will lead in the performance of the following licensing activities:

5.1.1 Licensing LEC Operations

LERC will complete the evaluation of LEC's license applications submitted for the following:

- Generation licenses – hydroelectric and thermal power plants;
- Transmission license
- Transmission System Operation license;
- Distribution license; and
- Import license.

5.1.2 Licensing of Micro Utility Operators

LERC will evaluate the license application of JEP which operates the distribution system in Nimba County utilizing LEC contracted cross border supply from Cote d'Ivoire. Other small composite micro utilities are expected to apply for and be issued permits.

5.2 Tariff Matters

Economic regulation entails developing and controlling the implementation of policy, procedures and standards for pricing and tariffs; determining appropriate tariff structures and pricing levels for electricity operators and evaluating the efficiency of the licensee's financial operations.

The ERU will lead in the performance of the following tariff related activities:

5.2.1 Tariff Regulations Approval by BOC

The Tariff Regulations and Methodology, which define the framework for approval of rates and charges for services provided by licensees will be completed in 2021. The finalization of the Tariff Regulations and Methodology, which includes the Multi-Year Pricing Model will take the outcome of the Cost-of-Service study into consideration.

5.2.2 Approval of long term LEC and JEP Tariffs

In 2020, LERC approved provisional tariffs for LEC as an interim measure pending the approval of a long-term tariff under the provisions of the Tariff Regulations and Methodology. When promulgated, LEC and JEP will be required to file tariff applications to LERC for the determination of their long-term tariff respectively.

5.2.3 Approval of Small Networks Tariff

LERC would approve tariffs for the operators of the proposed EU Funded micro utility developments in Buchanan and Greenville.

5.2.4 Cost of Service Study

MCA-L is funding a Cost of Service (CoS) and Willingness to Pay (WTP) Study. These studies will assist LERC in undertaking the informed and meaningful tariff approvals in future. LERC will review

and comment on the CoS and WTP Study and implement it in the Tariff Regulations and Methodology as well as employ it as a guide to the long-term tariff process. The studies are expected to be completed by January 2021.

5.3 Technical Standards for Performance Monitoring

An important aspect of LERC work will be to establish and monitor technical standards for the electricity supply industry. These technical regulatory instruments are required to ensure the efficient performance monitoring of the licensed activities under the ELL. The technical regulatory instruments cover the electricity system codes and the process of developing them will entail extensive stakeholder consultations and dialogue.

5.3.1 Distribution Code

The National Electricity Distribution Code of Liberia will contain the conditions that a Distribution licensee must meet in carrying out its obligations to distribute electricity under its license. It establishes the requirements, procedures, practices, and standards that govern the development, operation, maintenance and use of the distribution network in Liberia. The purpose of the Distribution Code is to ensure that the distribution network provides fair, transparent, nondiscriminatory, safe, reliable, secure, and cost-efficient delivery of electrical energy supply to consumers. The distribution code will have a mini-grid code section to guide in the mini-grid sector operations.

5.3.2 Grid Code

The Grid Code is the harmonized standardized technical document for the development, operation, maintenance and use of the Liberian Interconnected Transmission System. It will include chapters dedicated to governance, planning, interconnection, system operations, standards of performance, metering as well as information and data exchange. The Code will also contain provisions for transiting from the current state to the standards required under the Code.

5.3.3 Customer Service and Quality of Supply Regulations

Regulations on Customer Service and Quality of Supply will be developed that:

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

These Regulations will apply to:

- a. a licensed service provider engaged in electricity distribution or sale services; and
- b. a customer, an affiliate of a customer or prospective customer.

5.3.4 Wiring Code

This code will be the standards for internal wiring of premises in readiness for receiving electricity supply.

5.4 Indices for Distribution Supply Contracts

A distribution licensee would supply electricity and related services to its customers under a contract. LERC will oversee the terms and conditions of the supply contracts thereby ensuring that mandatory provisions on the quality and reliability of supply and the protection of consumer rights are adequately addressed.

5.4.1 Distribution supply contract template

Distribution service providers are required to prepare and sign contracts with their customers. The minimum requirements under such contracts have been outlined in the Licensing Regulations. To further assist the distribution licensees, a fully developed contract template will be prepared that ensures uniformity in the contracts being employed and saves them the costs of developing the contracts.

5.5 Dispute Resolution

6.5.1 Propose customer charters for licensees

The customer charter contains the distribution licensee's minimum guaranteed standards which is a voluntary statement of what level a customer must expect. It is an important tool for cultivating and maintaining good customer relations. LERC will propose a guide to the distribution licensees to use in developing their customer charters which will be approved by the Commission.

5.5.2 Draft Dispute Resolution Regulations

LERC will initially develop Complaint and Dispute Resolution Guidelines covering existing licensed service providers to address complaints between distribution licensees and their customers as well as network related disputes among 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.

5.5.3 Reporting formats for monitoring dispute handling by licensees

In order to track licensee responsiveness to customer complaints, LERC will develop and deploy a format for monitoring. The results of the monitoring will be a key indicator in assessing the performance of the licensee.

5.6 Training Workshops and Capacity Building

5.6.1 Licensing

Two sessions of training on licensing earmarked for BoC and staff of LERC as well as relevant staff of MME, RREA and such other organizations, including external stakeholders as may be necessary.

5.6.2 Tariffs

Two sessions of training on tariffs earmarked for BoC and staff of LERC as well as relevant staff of MME, RREA and such other organizations, including external stakeholders as may be necessary.

5.6.3 Technical Regulation

The training on technical regulation will cover the technical standards and the various codes to be developed.

5.6.4 Dispute Handling Procedure

Training in Alternative Dispute Resolution (ADR) will be held for the staff of the LLPAU and other critical frontline staff to enhance the expeditious handling of complaints.

5.6.5 Study Tours to Regulatory Commissions in ECOWAS Region

Study tours to other regulatory agencies in the region are an important capacity building strategy. The electricity supply industries of the countries of the region are similar and lessons from these tours will supplement other forms of training to position LERC Commissioners and staff to effectively deliver on the Commission's mandates.

5.7 Communication and Outreach

5.7.1 Public Outreach on LERC Activities

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

- Identifying stakeholders and developing a strategy for outreach and constant public consultation and engagement
- Utilize electronic media including the website and social media options for disseminating important information
- Publication and communication of important regulatory decisions and dissemination of policies by brochures to the various segments of the public.

5.7.2 Public Communication on Initialization of Licensing

Undertake a communication drive in respect of the commencement of licensing.

5.7.3 Public Communication on Initialization of Tariff Setting

Undertake public communication in respect of the commencement of tariff approvals for service provision.

5.8 Participation in Electricity Sector Investment Forum

5.8.1 Preparation of outreach material for Forum

The investment forum is expected to highlight the existing investment opportunities in Liberia's electricity supply industry. LERC's role at the forum is to present regulatory strategies on licensing procedures, tariff approval process and monitoring of the sector.

6.0 FUNDING AND SUPPORT FOR LERC ACTIVITIES

By virtue of the 2015 Electricity Law, LERC is to be funded through a levy charged 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.

Pursuant to the Implementing Entity Agreement (IEA) between Millennium Challenge Account Liberia (MCA-L) and LERC, the MCA-L continued to provide budgetary and operational support for LERC during the reporting period. Support from the MCA-L in the year included:

- Recruitment of LERC staff and payment of salaries,
- Provision of stationery and office supplies, furniture, and IT equipment
- Supply and maintenance of vehicles,
- Processing of ID and business cards,
- Procurement of contractor for the Cost-of-Service Study,
- Website Design, Development and Hosting,
- Regulatory Information Management System (RIMS), among others.
- Public relations and consumer outreach

LERC depends entirely on funding provided by the Millennium Challenge Corporation (MCC) through MCA-L. This funding support ends as of January 20, 2021, after which LERC is expected to sustain itself.

The European Union (EU) also funds a Technical Assistance (TA) program which provides LERC with three highly skilled consultants through June 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.

7.0 THE NEED FOR GOVERNMENT AND DONOR INTERVENTION

It is the expectation of LERC that the Government and Development Partners would help address the critical issue of funding for LERC over the next three years until a sustainable source of funding through regulatory levies and charges is attained consistent with the ELL.

Post-Compat budgetary support is essential to avoid interruption in the operations of the LERC.

Anticipated risks include:

- a) **Limited ability to exercise independence** – it will hamper the ability of LERC to function independently, in keeping with the ELL.
- b) **High staff turnover** – funding challenges could create difficulties in retaining the trained, skilled, qualified, experienced, and reliable staff.
- c) **Lost investment** – investment in LERC to this point would have been wasted as it is unlikely to achieve the intended objectives of transforming the electricity sector.