



# **Liberia Electricity Regulatory Commission**

# LIBERIA ELECTRICITY CORPORATION Distribution Service Area (Bomi & Cape Mount Counties) Inspection Report

Submitted by:

**The Technical Regulations Directorate (TRD)** 

March 2025

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#### 1.0 Introduction

The Liberia Electricity Regulatory Commission (LERC) is mandated under Section 3.3 B (3)(4) of the 2015 Electricity Law of Liberia (ELL) to conduct audits and inspection of records, facilities, and equipment of licensees as well as to establish, maintain, review, and amend, as appropriate, customer care standards. The Electricity Distribution Code of Liberia (EDCL 16.22.1) mandates a Distribution Licensee to maintain its distribution network in accordance with good utility practice and performance standards to ensure reliability and quality of electricity service, on both a short-term and long-term basis.

In compliance with the 2015 ELL and the 2020 EDCL, the Inspectorate unit of the Technical Regulation Directorate, assisted by the Public Affairs Unit conducted an inspection of the Liberia Electricity Corporation Distribution service areas located in Bomi and Grand Cape Mount Counties. In accordance with the Inspection Manual, the inspection began with an initial Opening Meeting held on February 7, 2025, at the LEC Bushrod Office and a field verification exercise followed in Bomi County and Grand Cape Mount County from February 24-26,2025, and February 27-28,2025, respectively.

The Inspection is based on the identified indexes and Regulatory Compliance Score Card outlined in Table 1.0 and Table 2.0.

#### 1.1 Objectives of the Inspection

The Inspection exercises included Verification of Documents, Field inspection of the 66kV transmission network, Field inspection of the 33kV medium voltage distribution network, Field inspection of 0.4/.23kV Low voltage distribution networks, and Safety coordination. The inspection was conducted to accomplish the following objectives:

- To identify obvious structural problems and hazards such as leaning power poles, damaged equipment enclosures, and vandalism,
- To confirm operational equipment functionality and conformity to the technical and safety standard,
- To work with a licensed service provider in the development of a compliance Plan to cure problems identified during the patrol.
- To ensure that appropriate follow-up and corrective action is taken regarding problems identified during the patrol, necessary to improve reliability and quality-of-service delivery to customers in those counties.
- To ensure licensed Service providers should maintain their distribution network in accordance with good utility practice and performance standards to ensure reliability and quality of electricity service, on both a short-term and long-term basis.

Table 1.0: Regulatory Compliance Score Card

No.	Compliance Status	Grading (%)	Rating	Risk level	Description	Action
1	Compliant (High)	95-100	1	Insignificant	Still operable.	No Action- capture that the asset is still in excellent working condition
2	Compliant (Medium)	85-94	2	Low	Still operable with reduced performance.	Noteworthy- capture in the next inspection cycle and adjust ranking as needed.
3	Compliant (Low)	75-84	3	Medium	Still operable with degraded performance.	Caution- important action required to address identified issues.
4	Non-compliant	60-74	4	High	Almost inoperable, poor performance.	Urgent- Action required
5	Significantly non- compliant	0-59	5	Very high/ Already failed	Inoperable.	Critical- immediate action required.

Table 2.0: Inspection Index

	Inspection Index
No.	
1	Documentation Checklist
2	Substation Checklist
3	High Voltage (66kV) Network checklist
4	Medium Voltage (33kV) Network Checklist
5	Low voltage (0.4/0.230kV) Network Checklist
6	Transformer Checklist
7	Metering Checklist
8	Safety Coordination

#### 2.0 Methodology

The inspection was participatory and collaboratively conducted by representatives from the LERC and LEC. Below is the detailed methodology for the inspection exercise.

- a) **Preliminary Meeting -** The inspection commenced with a briefing session between the LERC and LEC teams. The LERC staff outlined the primary objectives of the inspection, emphasizing its significance in ensuring reliability and quality of service delivery.
- b) Documentation Review Following the preliminary meeting, LEC was requested to submit the necessary documentation by the end of the inspection, as outlined in the Inspection Manual's "Documentation Checklist". Reports were captured in their original forms to help the team ascertain and validate the integrity of data collected during the inspection exercise.
- c) **Physical Inspection Using the Inspection Manual -** Field inspection was carried out using the checklists from the Inspection Manual.

#### 3.0 Inspection index Findings

(a) Documentation Checklist: This checklist obligates the LEC to submit several documents to be captured in their original forms to help the team ascertain and validate the integrity of data collected during the inspections. However, LEC didn't submit any document to the team.

#### (b) Substation Checklist:

Below are the current data for the substation:

Number of power transformer	1x10 MVA
66kV OHL incomer	Single circuit
66kV OHL incomer capacity	9.9MW
Outgoing 33kV feeders	3
Substation current peak load capacity	2MW
Spare 33kV breaker	1

On average, the substation is mostly clean, and all pieces of critical equipment were found to be functional and in order. Whilst LEC has made the best efforts at ensuring meeting technical and safety standards, however, the following key issues were observed:

- ✓ There is a fall hazard due to cracks on the substation floor right at the entry door.
- ✓ One of the window bars is removed. This eliminates the critical barrier against illegal entry.
- ✓ Flood marks observed on the substation building indicate susceptibility of the control
  - building to flooding, which affects access to building during rainy season. This observation was confirmed by assigned employees.
- ✓ Both the base radio and the handset signals fluctuate/drop



leaving a communication gap between dispatch, substation, and generation during operations and switching.

- ✓ There is a register or logbook at the Kle Substation. However, it does not include records of the Power frequency, the power factor, and the reactive power.
- ✓ Absence of substation maintenance history/evidence or maintenance plan.
- ✓ In the control room, there is leakage in the bathroom from the rooftop/casting.
- ✓ The control building door handles both outside and inside are all damaged.
- ✓ Shortage of fuel in standby generator prevented it from coming on.
- ✓ Damaged plumbing fixture in the bathroom and malfunctioning hot water system.
- ✓ Littering of hardware spares, retrieved damaged network materials in Switchyard and inside the control room.

#### (c) High Voltage (66kV) Network Checklist:

The high voltage 66kV network is a 38 Km overhead line and is comprised of towers and monopoles poles carrying 150 square millimeter AAA conductors. This network begins from the Virginia substation and terminates at the Kle substation. The following are key issues observed along this corridor:

- ✓ Encroachment in the right of way (ROW) on account of new construction works.
- ✓ Poor Vegetation Clearing management.
- ✓ At monopole #94, the pole foundation is being hugely undermined due to excavation.
- ✓ Many guys/stays are damaged/removed in the Virginia to Kle corridor,



leaving many poles structures mechanically unstable.

- ✓ It was noticed that most of the monopoles in the corridor are experiencing foundation failure. Notably, monopoles numbers 368 to 374 are leaning resulting in low clearances posing a safety risk, and
- ✓ Indiscriminate startup of bush fires along line corridors.

#### (d) Medium Voltage (MV) Network Checklist:

The 33kV network spanning 203.8 Km and 120 square millimeters AAA conductors emanate from the Kle Substation and comprise the Kle-Po River, Kle-Tubmanburg, and the Kle-Madina feeders respectively. The network is practically new, properly sag lines and a total of eighteen (18) isolation points along main lines and T-offs. Nonetheless, the following key issues were observed:

- ✓ Although informed of contracts being signed with contractors, Vegetation Clearing Management is poor and a challenge.
- ✓ Excavation of soil/soil mining activities is undermining Poles notably between Po River Bridge and Kle Substation.
- ✓ Indiscriminate startup of bush fires along line corridor leaving the network comprising mostly of wooden poles vulnerable and undermines system reliability, LEC has begun replacing wooden poles in critical sections of the network with concrete poles.
- ✓ Inflexibility of operations and long durations of troubleshooting during abnormal line conditions due to limited isolation points.
- ✓ Absence of stays on MV poles in some areas.

#### (e) Low Voltage network Checklist:

The 0.4/0.23kV network spanning a total of 218.1 Km. It comprises varied sizes of ABC bundled conductors. The network is practically new, transformer stations have neither oil leakages nor bypassed Circuit breakers, mostly properly sag lines. Nonetheless, the following key issues were observed:

- ✓ Excavation of soil/soil mining activities is undermining poles between the Po River Bridge and Kle Substation.
- ✓ In some areas clearance for LV bundled conductors and service drops do not conform to clearance standards.
- ✓ Guys/stays on some LV poles in Kle, Tubmanburg, Gbah, Tienii are completely broken/damaged.
- ✓ Faulty streetlights, this is posing a security threat at night and in some areas, the streetlights are on mostly during the day.



Wooden pole damaged by bush fire

#### (f) Transformer Checklist:

Transformer stations have neither oil leakages nor bypassed Circuit breakers. Nonetheless, the following were observed:

- ✓ One leaning transformer was found between the Po River and Kle Substation (Sass Town) and another one between Tubmanburg and Western Cluster.
- ✓ Lack of energy monitoring meters on all transformers for energy accounting and load analysis.
- ✓ Loose/damaged transformer earthing in some areas puts pedestrians at risk in Bomi and Cape Mount.

#### (G) Metering Checklist:

The Kle Substation has energy meters on all outgoing 33kV feeders, which makes energy accounting possible. However, the following key issues were observed:

✓ Meters installed at customer's premises are largely bypassed.

#### (H) Safety Coordination:

Assigned staff at the Bomi Corridor Business Unit are safety conscious, have in place a structured organizational culture, and are well attired in personnel protective equipment (PPE). However, the following key issues were observed:

✓ Inadequacy of LEC Staff in the Bomi County and Grand Cape Mount County distribution service areas to resolve critical Network abnormalities and resolve on a timely basis customers' complaints.

- ✓ Absence of equipment (Crane Truck and Bucket Truck) to resolve critical problems (burnt poles and broken poles) resulting in delayed responses.
- ✓ The Team lacks basic hand tools and spares.

Table 3.0: Summary of Bomi-Cape Mount Counties Regulatory Compliance Score Card

Na	loonootton lodov		(	Compliance	Status	
No.	Inspection Index	1	2	3	4	5
1	Documentation Checklist					<b>√</b>
2	Substation Checklist		✓			
3	High Voltage(66kV) Network checklist			<b>√</b>		
4	Medium Voltage(33kV) Network Checklist			✓		
5	Low voltage (0.4/0.230kV) Network Checklist		✓			
6	Transformer Checklist		✓			
7	Metering Checklist			<b>√</b>		
8	Safety Coordination			<b>√</b>		

Table 4.0: Overall Regulatory Compliance Score, Bomi-Grand Cape Mount Counties

No. Inspection Index	Inspection Index	Compliance Status				
		1 2 3 4 5	5			
1	Overall Compliance			✓		

The overall Compliance status of LEC for the Bomi-Grand Cape Mount Counties distribution service areas is compliant (low), has a medium risk level, and still operable with degraded performance. Actions required to address identified issues. (please refer to Table 1.0 for explanatory notes to the various ratings of the scorecard and Table 3.0 for compliance rating).

#### 4.0 Limitations in Inspection

Our inspection was dependent on the available records provided by LEC. There were other records that the LEC team couldn't provide for us, which were very crucial to our inspections. Also, the use of the naked eyes could not verify actual conditions of Pin Insulators, cross arm braces, machine bolts, washers, and other network components.

The findings outlined in this report were observed only during the period of inspection, which took place in Bomi County and Grand Cape Mount County from February 24-26,2025, and February 27-28,2025, respectively.

#### 5.0 Recommendations

It is expected that LEC will work towards the attainment of full regulatory compliance in the distribution service areas of Bomi County and Grand Cape Mount County.

Below are lists of recommendations for consideration and action:

- 1. That the Commission mandates LEC to fully implement Vegetation clearing under all existing 66kV High Voltage and 33kV medium voltage lines. The deployment of Power saws and earthmoving equipment replacing cutlasses at this point is highly encouraged.
  - 2. That LEC accelerates its action of replacement of all wooden poles with concrete or steel poles in the Medium Voltage distribution network due to high vulnerability to indiscriminate bush fire startup. It is recommended that all future rural MV networks comprise only concrete poles or steel poles to mitigate the risk to bush fire.
  - 3. That all bypassed meters be normalized to enable energy accounting and improve revenue generation.

- 4. Auto-reclosers and additional isolators are to be installed along the 33kV MV network to enhance operational flexibility and reduction in outage duration during abnormal network conditions.
- 5. That the manpower be increased and critical logistics be sourced to adequately maintain the Bomi County and Grand Cape Mount County distribution service areas.

#### 6.0 Conclusion

The overall Compliance status of LEC for the Bomi-Grand Cape Mount Counties distribution service areas is compliant (low), has a medium risk level, and still operable with degraded performance. Actions are required to address identified issues. Upon receiving this report by LEC, within 10 days as indicated in the Inspection Manual, LEC shall provide the Commission with a detailed action plan including schedules/timelines, and a

methodology for resolving findings as outlined.



66KV monopole foundation failure

### APPENDIX A LISTING OF TRANSFORMERS INSTALLED IN THE BOMI AND GRAND CAPE MOUNTIES DISTRIBUTION SERVICE AREAS.

	Kle Po-River Distribution Transformers						
No	Name	Installed	Location	Status			
		Capacity					
1	TEAI	15kVA	TEAI	Operational			
2	GBANGBAS TOWN	25kVA	GBANGBAS	Operational			
			TOWN				
3	BARMOH	15kVA	BARMOH	Operational			
4	SUGBON	15kVA	SUGBON	Operational			
5	LEAKPAI TOWN	25kVA	LEAKPAI	Operational			
			TOWN				
6	SAYOU TOWN	15kVA	SAYOU TOWN	Operational			
7	SASS TOWN 1	100kVA	SASS TOWN	Operational			
8	SASS TOWN 2	200kVA	SASS TOWN	Operational but leaning			

9	BIO CHICO	150kVA	SASS TOWN	Operational
10	GARGAMA	100kVA	GARGAMA	Operational
11	BLAGGAI	15kVA	BLAGGAI	Operational
12	COOPER FARMS	15kVA	COOPER	Operational
	RESIDENCE		FARMS	
			RESIDENCE	
13	COOPER FARMS	200kVA	COOPER	Operational
	FACTORY		FARMS	
			FACTORY	
14	GOLODEE	25kVA	GOLODEE	Operational
15	KARNGA	25kVA	KARNGA	Operational
16	JENNEH TOWN 1	25kVA	JENNEH	Operational
			TOWN	
17	JENNEH TOWN 2	15kVA	JENNEH	Operational
			TOWN	
18	JENNEH TOWN 3	50kVA	JENNEH	Operational
			TOWN	
19	FOLLEY TOWN	25kVA	FOLLEY TOWN	Operational
20	LEVUMA	50kVA	LEVUMA	Operational
21	DEMEH	25kVA	DEMEH	Operational
22	DORLEYLAH	15kVA	DORLEYLAH	Operational
23	VINCENT TOWN 2	100kVA	VINCENT	Operational
			TOWN	
24	VINCENT TOWN 1	100kVA	VINCENT	Operational
			TOWN	
25	Po-River Water Factory	1000kVA	Po-River	Damaged
			Water Factory	

	Kle – Tubmanburg Distribution Transformers						
No	Name	Installed	Location	Status			
		Capacity					
1	KLAY NO.3	100kVA	KLAY Town	Operational			
2	KLAY NO.4	100kVA	KLAY Town	Operational			
3	GOVERNMENT FARM	15kVA	GOVERNMENT	Operational			
	NO.1		FARM				
4	GOVERNMENT FARM	15kVA	GOVERNMENT	Operational			
	NO.2		FARM				
5	GUIE	50kVA	GUIE Town	Operational			
6	VORKOR	50kVA	VORKOR Town	Operational			
7	UCI CHICKEN FARM	1,000kVA	Maheer Town	Operational			

8	TUBMANBURG NO.18	25kVA	Maheer Town	Operational
9	SAWMILL TX	15kVA	Sawmill	Operational
			Junction	
10	TUBMANBURG NO.17	15kVA	Sirleaf Camp	Operational
11	TUBMANBURG NO.16	25kVA	Coleman Hill	Operational
12	SNOWE FARMS	100kVA	SNOWE FARMS	Operational
13	TUBMANBURG NO.15	25kVA	Weakama	Operational
14	TUBMANBURG NO.19	25kVA	TUBMANBURG City	Operational
15	TUBMANBURG NO.14	200kVA	TUBMANBURG City	Operational
16	UNIT #1	100kVA	TUBMANBURG City	Operational
17	TUBMANBURG NO.13	50kVA	TUBMANBURG City	Operational
18	TUBMANBURG NO.9	200kVA	TUBMANBURG City	Operational
19	TUBMANBURG NO.8A	200kVA	TUBMANBURG City	Operational
20	TUBMANBURG NO.8B	200kVA	TUBMANBURG City	Operational
21	TUBMANBURG NO.7A	200kVA	TUBMANBURG City	Operational
22	TUBMANBURG NO.7B	200kVA	TUBMANBURG City	Operational
23	TUBMANBURG NO.6	200kVA	TUBMANBURG City	Operational
24	TUBMANBURG NO.5A	200kVA	TUBMANBURG City	Operational
25	TUBMANBURG NO.5B	200kVA	TUBMANBURG City	Operational but leaning
26	WESTERN CLUSTER LIMITED	200kVA	TUBMANBURG City	Operational but vegetation
27	SINOHHYDRO 14 LIBARIA	500kVA	TUBMANBURG City	Operational
28	TUBMANBURG NO.1A	100kVA	TUBMANBURG City	Operational
29	TUBMANBURG NO.1B	50kVA	TUBMANBURG City	Operational
30	TUBMANBURG NO.2	50kVA	TUBMANBURG City	Operational
31	TUBMANBURG NO.3	100kVA	TUBMANBURG City	Operational
32	TUBMANBURG NO.4A	200kVA	TUBMANBURG City	Operational

33	TUBMANBURG NO.4B	200kVA	TUBMANBURG	Operational
			City	
34	TUBMANBURG NO.12A	200kVA	TUBMANBURG	Operational
			City	
35	TUBMANBURG NO.12B	200kVA	TUBMANBURG	Operational
			City	
36	TUBMANBURG NO.10	100kVA	TUBMANBURG	Operational
			City	
37	TUBMANBURG NO.11	200kVA	TUBMANBURG	Operational
			City	

Kle Meadina Distribution Transformers						
No	Name	Installed	Location	Status		
		Capacity				
1	KLAY 2	100kVA	KLAY Town	Operational		
2	AMADU TOWN #1	15kVA	AMADU TOWN	Operational		
3	AMADU TOWN #2	15kVA	AMADU TOWN	Operational		
4	JOHNSON TOWN	50kVA	JOHNSON TOWN	Operational		
5	BROWN VILLAGE	15kVA	BROWN VILLAGE Town	Operational		
6	GBAH JARKEH (TRAFO #1)	200kVA	GBAH JARKEH Town	Operational		
7	GBAH JARKEH (TRAFO #2)	100kVA	GBAH JARKEH Town	Operational		
8	GBAH JARKEH (TRAFO #3)	200kVA	GBAH JARKEH Town	Operational		
9	GBAH JARKEH (TRAFO#4)	100kVA	GBAH JARKEH Town	Operational		
10	GBAH JARKEH (TRAFO#4B)	100kVA	GBAH JARKEH Town	Operational		
11	GBAH FOBOI	100kVA	GBAH FOBOI Town	Operational		
12	OBASANJO FARMS	200kVA	OBASANJO FARMS	Operational		
13	SIAFA KEH	50kVA	SIAFA KEH Town	Operational		
14	KONJA TOWN	100kVA	KONJA TOWN	Operational		
15	GBALLAS TOWN	200kVA	GBALLAS TOWN	Operational		
16	MATAMBO ESTATE	200kVA	MATAMBO ESTATE	Operational		
17	NIMBA POINT	100kVA	NIMBA POINT	Operational		
18	MADINA (TRAFO #1)	100kVA	MADINA	Operational		

19	MADINA (TRAFO# 2)	100kVA	MADINA	Operational
20	MADINA ROCK	1350kVA	MADINA ROCK	Operational
	CRUSHER		CRUSHER	
21	Robertsport Junction	15kVA	Robertsport	Operational
22	TEEH TOWN	50kVA	TEEH TOWN	Operational
23	FANDOR TOWN	50kVA	FANDOR TOWN	Operational
24	BOMIE	50kVA	BOMIE Town	Operational
25	FALIE	25kVA	FALIE Town	Operational
26	LATIA	50kVA	LATIA Town	Operational
27	SEMBEHUM	100kVA	SEMBEHUM	Operational
			Town	
28	MOH QUARTERS	15kVA	MOH QUARTERS	Operational
29	TOSOR TOWN	50kVA	TOSOR TOWN	Operational
30	ROBERTSPORTS PRISON	15kVA	ROBERTSPORTS PRISON	Operational
31	ROBERTSPORT TRAFO #1	200kVA	ROBERTSPORT	Operational
32	ROBERTSPORT TRAFO #2	200kVA	ROBERTSPORT	Operational
33	ROBERTSPORT TRAFO #3	200kVA	ROBERTSPORT	Operational
34	ROBERTSPORT TRAFO #4	200kVA	ROBERTSPORT	Operational
35	ROBERTSPORT TRAFO #5	200kVA	ROBERTSPORT	Operational
36	ROBERTSPORT TRAFO #6	200kVA	ROBERTSPORT	Operational
37	MANI	50kVA	MANI Town	Operational
38	SANJANAMALOR GAWULA	50kVA	SANJANAMALOR GAWULA Town	Operational
39	VONZULA TOWN	100kVA	VONZULA TOWN	Operational
40	BONGO TOWN	25kVA	BONGO TOWN	Operational
41	SINJEH (TRAFO #1)	100kVA	SINJEH Town	Operational
42	SINJEH (TRAFO #2)	50kVA	SINJEH Town	Operational
43	SINJEH (TRAFO #3)	50kVA	SINJEH Town	Operational
44	SINJEH (TRAFO #4)	100kVA	SINJEH Town	Operational
45	University Of Liberia (Sinje Campus)	200kVA	University Of Liberia (Sinje Campus)	Operational
46	GOHN	50kVA	GOHN Town	Operational
47	KANGA	100kVA	KANGA Town	Operational
48	SMALL BOMI	15kVA	SMALL BOMI	Operational

49	GONONAMALOR TOWN	15kVA	GONONAMALOR	Operational
			TOWN	
50	Geebay	15kVA	Geebay Town	Operational
51	SOMBAE TOWN	50kVA	SOMBAE TOWN	Operational
52	DANIEL B TOWN	200kVA	DANIEL B TOWN	Operational
53	YENLA(NYIELA)	25kVA	YENLA(NYIELA)	Operational
54	BARKAR	15kVA	BARKAR Town	Operational
55	KPENEJI QUEMAH #1	25kVA	KPENEJI	Operational
			QUEMAH Town	
56	KPENEJI QUEMAH #2	15kVA	KPENEJI	Operational
			QUEMAH Town	
57	WANGEKOR	50kVA	WANGEKOR	Operational
			Town	
58	NAGBEMA	50kVA	NAGBEMA Town	Operational
59	TIENI TRAFO#1	100kVA	TIENI Town	Operational
60	TIENI (ESTATE) TRAFO#2	25kVA	TIENI (ESTATE)	Operational
61	TIENI TRAFO#3	50kVA	TIENI Town	Operational
62	WONDE	50kVA	WONDE Town	Operational
63	WEILOR	100kVA	WEILOR Town	Operational
64	NGANDOHUN	15kVA	NGANDOHUN	Operational
			Town	
65	SANJANAMALOR	50kVA	SANJANAMALOR	Operational
			Town	
66	BO TRAFO #1	200kVA	BO Town	Operational
67	BO TRAFO #2	100kVA	BO Town	Operational

# APPENDIX B PUNCH LIST OF DEFECTS, ACTIONS REQUIRED AND TIMELINE FOR CURING DEFECTS

No.	Location	Defect	Action Required	Completion Date
1	Po River – Kle Substation	Encroachment in the right of way (ROW)	Working with the Ministry of Public Works to define the ROW is essential and remove all structures in the ROW.	October 2025
2	Kle – Madina, Kle – Po River, Kle – Tubmanburg	Poor Vegetation Clearing Management	Immediate Action: Accelerate vegetation	June 2025

	Virginia – Kle 66kV		clearing and extend 5m beyond the line routes, dig out stumps and spray(chemical) line routes.	
			Long term: Use a machine to clear vegetation.	January 2026
3	Po River – Kle Sub	Pole #94 foundation undermined.	Backfill foundation	May 2025
4	Po River – Sass Town	Monopole (364 – 374) foundation failure.	Construct new foundations	June 2025
5	Po River – Tubmanburg – Robertsport – Bo Waterside (Bomi & Cape Mount)	Indiscriminate startup of bush fires.	Accelerate the replacement of wood poles to concrete & steel poles.	January 2026
6	Kle Substation	Cracks on the substation floor at the entry door.	Repair steps and entry.	June 2025
7	Kle Substation	Base radio and handset signals fluctuate/drop leaving a communication gap between dispatch, substation, and generation during operations and switching.	Desk phone must be able to record and store switching and operational instructions.	May 2025
	Kle Substation	Door handles on both outside and inside are all damaged.	Replace door handles.	May 2025
	Kle Substation	Leakage in the bathroom from the rooftop/casting.	Repair leakage spot.	May 2025
	Kle Substation	Damaged plumbing fixture in the bathroom and malfunctioning hot water system.	Repair all damaged and malfunctioning plumbing fixtures.	May 2025

8	Kle Substation	Absence of substation maintenance history/evidence or maintenance plan.	Make available the maintenance record and plan at the substation.	May 2025
9	Kle Substation	Window bar is removed.	Repair window bar.	May 2025
10	Kle Substation	Flood marks observed on the substation building.	Additional crushed rocks and painting of control building required.	May 2025
11	Kle – Madina, Kle – Po River, Kle - Tubmanburg	Limited isolation point.	Additional Isolation points required.	September 2025
12	Kle, Tubmanburg, Gbah, Tienii, Bo Waterside	Some damaged guys/stays on LV poles in Kle, Tubmanburg, Gbah, Tienii, Bo Waterside.	Repair all damaged stays.	June 2025
13	Bomi and Cape Mount	Faulty streetlights	Repair all faulty streetlights.	June 2025
14	Bomi and Cape Mount	Meters installed at customer's premises are largely bypassed.	Rectify metering issues and have a team going from town to town to resolve these issues. Increase vending centers. Make available specific customer care centers in these counties.	October 2025
15	Sass Town and Tubmanburg	Leaning Transformers	Level and align all leaning transformers.	May 2025
16	Bomi and Cape Mount	Absence of equipment	Dedicated equipment (Crane Truck, Bucket Truck, etc.) required.	January 2026
17	Bomi and Cape Mount	Limited manpower	Increase Manpower	October 2025

# From the field (Exhibit 1)



Briefing before commencing inspection



Wood shop engaged in power theft in Grand Cape Mount County



Damaged pole by bush fire



 ${\it LERC Technical team interacts with LEC customers in Sasstown, Bomi\ County}$ 



Joint inspection of light pole



Technical team inspects meter



Damaged MV pole in Grand Cape Mount County



66KV monopole foundation failure



Bushy transformer



Dirt miners undermine a 66KV monopole



Leaning transformer poles



Leaning LV pole



Vegetation interferes with LV line



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Damaged LV pole in Boimi Town, Robertsports Highway in Grand Cape Mount County