PARLIAMENT OF THE REPUBLIC OF UGANDA

REPORT OF THE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES ON THE ERRATIC ELECTRICITY SUPPLY IN WEST NILE

OFFICE OF THE CLERK TO PARLIAMENT

PARLIAMENTARY BUILDINGS

KAMPALA

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LIST OF ACRONYMNS

AG	Auditor General
CDAP	Community Development Action Plan
CIF	Cost Insurance and Freight
CSR	Corporate Social Responsibility
EPC	Engineering Procurement and Construction
EPFC	Energy Price Fuel Component
ERA	Electricity Regulatory Authority
FY	Financial Year
GERP	Grid Expansion and Reinforcement Project
GoU	Government of Uganda
HFO	Heavy Fuel Oil
HPP	Hydro Power Plant
IDA	International Development Association
IPS	Industrial Promotion Services
KGNA line	Kole-Gulu-Nebbi-Arua line
kV	kilo Volt
kWh	kilo Watt-hour
MEMD	Ministry of Energy and Mineral Development
MoU	Memorandum of Understanding
MOWT	Ministry of Works and Transport
MVA	Mega Volt-Amperes
MW	Mega Watt
MWh	Mega Watt hour
NEMA	National Environment Management Authority
O and M	Operation and Maintenance
PAP	Project Affected Persons
PPA	Power Purchase Agreement
RAP	Resettlement Action Plan
SCADA	Supervisory Control and Data Acquisition
UEB	Uganda Electricity Board
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UGX	Uganda Shillings
UNOC	Uganda National Oil Company
UNRA	Uganda National Roads Authority
URC	Uganda Railway Corporation
USD	United States Dollar
WENRECO	West-Nile Rural Electrification Company

1.0 INTRODUCTION

During the Plenary Sitting of 11th August 2022, Hon. Biyika Lawrence Songa, MP Ora County, Zombo District on behalf of the Members of Parliament from West Nile Sub-region presented a Motion for a resolution of Parliament to urgently address the electricity supply challenges in West Nile Sub-region. Parliament adopted the resolution and the Speaker directed the Committee on Environment and Natural Resources to investigate circumstances surrounding the delay in the electrification of West Nile Sub-region and report back to the House. In accordance with Rule 159 of the Rules of Procedure of Parliament, the Committee hereby reports.

2.0 BACKGROUND TO THE MOTION

The Constitution of the Republic of Uganda, 1995 as amended enjoins the State to promote and implement energy policies, which will ensure that people's basic needs and those of environmental preservation are met. The Energy Policy for Uganda and the Electricity Act as amended operationalize the provisions of the Constitution in regard to these energy policies.

The movers of the Motion noted that West Nile has never been connected to the national grid. Citing the Electricity Act, they noted that in an effort to address power shortage in West Nile Region, the Government of Uganda in 2003 through the Ministry of Energy and Mineral Development granted a concession to West Nile Rural Electrification Company (WENRECO) to generate, distribute and sell electricity in West Nile for a period of 20 years.

The petitioners acknowledged that WENRECO having failed to fulfill its obligations, Electro-Maxx was contracted to supplement power generation in 2019. However, despite this intervention, West Nile's electricity supply to date is unreliable, unstable, unpredictable, costly and is characterized by constant power outages, interruptions and blackouts.

They further noted that Government of Uganda (GoU) has previously made promises to have the region connected to the National Grid by September 2022 but this was postponed to March 2023. The prayers sought in the Motion were that:

1) Parliament urges Government through the Ministry of Energy and Mineral Development to urgently provide funds to the Uganda National Oil Company to supply fuel to Electro-Maxx to generate the licensed 8.28 MW of electricity to be supplied to West Nile Rural Electrification Company and to ensure stable and reliable supply of electricity to the people of West Nile Region.

2) The Ministry of Energy and Mineral Development to fast-track the evacuation of electricity (132 kV line) to West Nile and also expedite the work at the substations in Arua and Nebbi Districts to enable the region get connected to the National Grid.

3) (a) Government to avail all the required funds to speed up completion of the 6.6 MW at Nyagak III and

(b) replace the second turbine at Nyagak I to generate 3.5 MW installed capacity instead of the 1.7 MW currently being produced.

4) The Ministry of Energy and Mineral Development to upgrade the existing electricity network in West Nile region to be able to distribute from high voltage 132kV from the National Grid transmission line once evacuated to the region by March 2023 as promised by Government.

5) The Ministry of Energy and Mineral Development intensifies expansion of the network to rural areas to cover all the parishes in West Nile Region to support the Parish Development Model and reduce the high rate of environmental degradation.

6) A forensic audit of the operations of Electro-Maxx to be conducted to ascertain whether Uganda has obtained value for money for the period Electro-Maxx has operated in West Nile.

7) A compliance audit to be carried out on Electricity Regulatory Authority (ERA) in relation to the operations of Electro-Maxx and WENRECO.

These prayers were adopted as the terms of reference for the Committee.

3.0 METHODOLOGY

In undertaking this assignment, the Committee adopted the following methodology:

i. Undertook physical visits and inspection of electricity generation facilities operated by WENRECO at Nyagak I.

ii. Physical visits and inspection of ongoing works at Nyagak III

iii. Physical visits and inspection of generation facilities at Ewata, in Arua as operated by Electro-Maxx

iv. Physical visits and inspection of substations under construction in Arua and Nebbi Districts.

v. Held meetings with representatives of WENRECO, Electro-Maxx, Electricity Regulatory Authority, Uganda Electricity Transmission Company, Contractors of UETCL, Owner's Engineer at ongoing transmission projects

vi. Held public hearings at Muni University and Arua Public Primary School in Arua District

vii. Received submissions from the area local leaders including Chairpersons, Resident District and City Commissioners, Local Government Councilors in Arua and Zombo Districts

viii. Reviewed documents submitted to the Committee by the various electricity players in West Nile (See Annex 1 for comprehensive list)

ix. Held Committee meetings with the electricity stakeholders in the Precincts of Parliament

4.0 FINDINGS, COMMITTEE OBSERVATIONS AND RECOMMENDATIONS

The observations in this report are made on the various players in the Electricity Sector of West Nile. They matched as practically possible to the prayers made by the movers of the motion. Consequently, observations were made on the Electro-Maxx Uganda Limited, West Nile Rural Electrification Company (WENRECO), Nyagak III, the Transmission infrastructure projects and any other incidental matters.

4.1 Background to Power Supply in West Nile

In the meetings held with key stakeholders in West Nile, the Committee was informed that WENRECO took over the operations and infrastructure originally owned and operated by the Uganda Electricity Board, in a Concessional Agreement that became operational in 2003. WENRECO inherited a generating facility that was producing 1.5MW of electricity from Heavy Fuel Oils and serving less than 1000 customers for approximately 4 hours a day.

WENRECO decommissioned the generators after the commissioning and coming on board of Nyagak I in September 2012, which has an installed capacity of 3.5 MW.

Due to the increase in demand, Nyagak I was unable to meet demand in West Nile. This consequently led Government of Uganda to enter into an agreement with Electro-Maxx to relocate and install an additional 8.28MW diesel facility in Arua to complement generation from WENRECO.

Currently, overall, West Nile has an installed capacity of 11.78MW, that is; 3.5 MW from Nyagak I, a hydropower plant and 8.28MW from Electro-Maxx which is a thermal generation facility. However, the Committee was informed that, although Electro-Maxx had a licensed capacity of 8.28 MW, tested capacity was 6.5MW while the highest ever produced capacity was 3 MW[1]. The Committee was informed that peak demand for West Nile is 6MW and suppressed demand is estimated at 5MW[2].

[1]Presentation made on 23rd August 2022 by the Minister of Energy to the Committee on Environment and Natural Resources

[2] ibid

The Committee observed that as per the reported installed capacity from Nyagak I and Electro-Maxx, Arua should be having sufficient capacity to meet its current and suppressed demand. However, this is not the case as load shedding and outages remain rampant in the region.

4.2 Actual Total Electricity Supply in West Nile

The Committee extracted generation figures from ERA's Comprehensive Electricity Supply Industry Database. The database gives figures for WENRECO actual generation per quarter and what it buys from Electro-Maxx for the period 2015 to 2019, as reflected in Table 1 below. Computations were made to obtain the average power produced in Mega Watts (MW). This was done to obtain average power generated per facility as compared to the installed capacity.

For quality control, these figures were compared with those submitted to the Committee by WENRECO and Electro-Maxx during its meetings with them (see Tables B.1 and B.2 in Annex 2). It should be noted that generation from Electro-Maxx begun in Quarter 2 of 2019.

Table 1: Power Generated by the Generation Companies in West Nile

Year	Quarter	WESTNILE RURAL ELECTRICIFACTION COMPANY					
		WENRECO Generation (kWh)	Electro-Maxx (kWh)	Total Generated (kWh)	WENRECO Generation in MW*	Electro-Maxx Generation in MW*	Total Generation in MW
2021	Q4	5,008,350	2,352,139	7,360,489	2.32	1.09	3.41
	Q3	5,498,370	1,206,319	6,704,689	2.55	0.56	3.10
	Q2	4,719,170	1,509,730	6,228,900	2.18	0.70	2.88
	Q1	4,923,819	1,678,591	6,602,410	2.28	0.78	3.06
2020	Q4	5,430,687	1,448,390	6,879,077	2.51	0.67	3.18
	Q3	4,527,888	706,702	5,234,590	2.10	0.33	2.42
	Q2	4,293,186	589,503	4,882,689	1.99	0.27	2.26
	Q1	4,475,749	891,671	5,367,420	2.07	0.41	2.48

2019	Q4	4,805,457	1,513,830	6,319,287	2.22	0.70	2.93
	Q3	3,908,739	1,224,700	5,133,439	1.81	0.57	2.38
	Q2	3,171,740	1,128,000	4,299,740	1.47	0.52	1.99
	Q1	2,309,092		2,309,092	1.07	-	1.07
2018	Q4	4,416,323		4,416,323	2.04	-	2.04
	Q3	3,979,235		3,979,235	1.84	-	1.84
	Q2	4,042,557		4,042,557	1.87	-	1.87
	Q1	4,144,457		4,144,457	1.92	-	1.92
2017	Q4	4,731,794		4,731,794	2.19	-	2.19
	Q3	4,009,962		4,009,962	1.86	-	1.86
	Q2	3,081,395		3,081,395	1.43	-	1.43
	Q1	3,090,000		3,090,000	1.43	-	1.43
2016	Q4			-	-	-	0.00
	Q3	3,785,728		3,785,728	1.75	-	1.75
	Q2	3,090,000		3,090,000	1.43	-	1.43
	Q1	3,785,753		3,785,753	1.75	-	1.75
2015	Q4	2,975,343		2,975,343	1.38	-	1.38
	Q3	2,935,561		2,935,561	1.36	-	1.36
	Q2	2,800,627		2,800,627	1.30	-	1.30
	Q1	2,682,939		2,682,939	1.24	-	1.24

Source: ERA, Comprehensive Electricity Supply Industry Database[3] and Author's Computation

[3] Accessed at: https://www.era.go.ug/index.php/stats/generation-statistics/energy-generated#

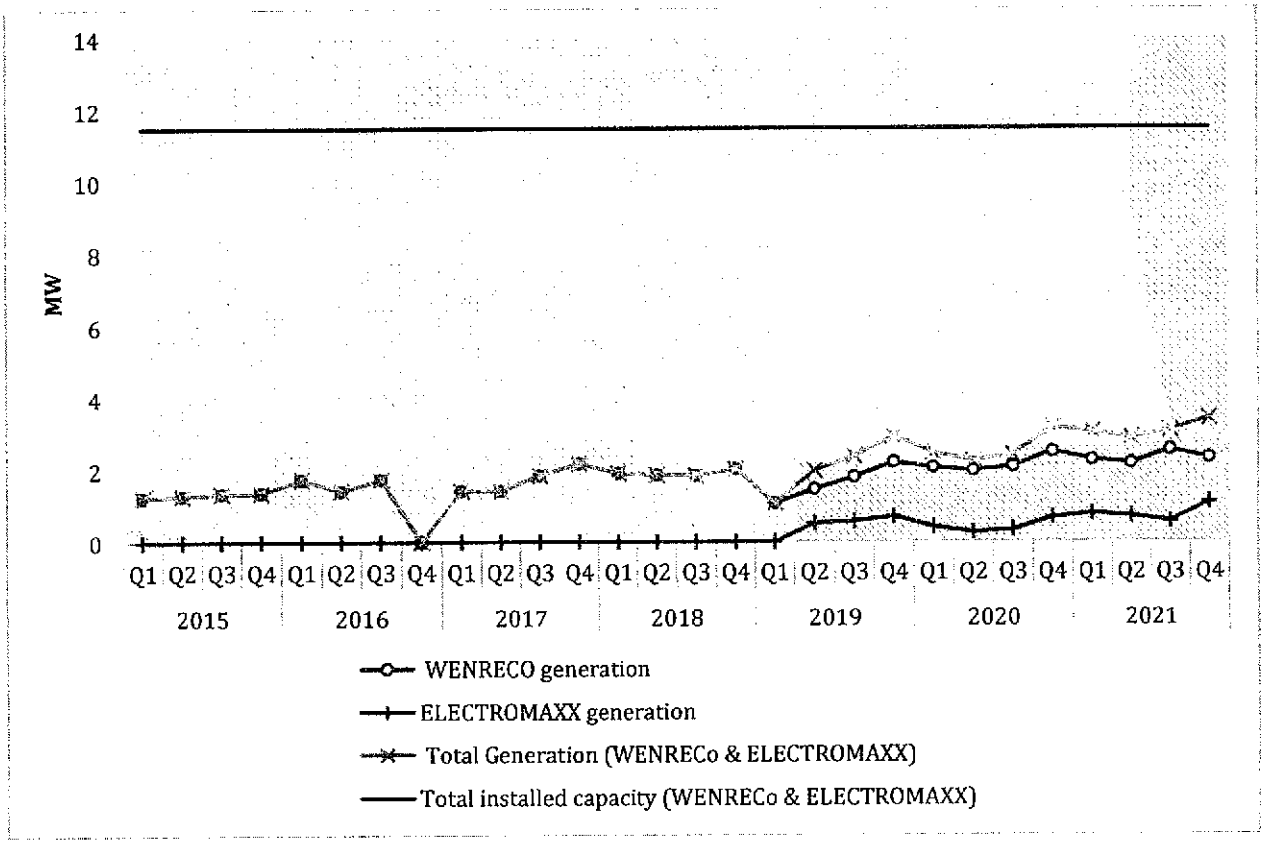


Figure 1: Actual Total Electricity Supply in West Nile

From Table 1 above and Figure 1, the Committee observes that the total generation for West Nile from the two generators WENRECO and Electro-Maxx, for the period 2015 to 2021 ranges from 1.07MW, the lowest value reported in quarter 1 of 2019, to the highest value of 3.41MW reported in quarter 4 of 2021. The Committee notes that the lowest figure is attributed to generation from only Nyagak I (operated by WENRECO) as the Electro-Maxx facility hadn't yet come on board by 2015. Electro-Maxx began generating electricity in quarter 2 of 2019. However, the Committee further observes that the total actual production for both facilities is below the installed capacity in West Nile of 11.78MW and is below the total peak demand of 6MW for the region.

Both facilities are operating way below their installed capacity. The highest generation for the WENRECO facility is recorded in Quarter 3 of 2021 as 2.55MW while the lowest is 1.07MW in quarter 1 of 2019. This is below the installed capacity of Nyagak I of 3.5MW. On the other hand, the highest generation for the Electro-Maxx facility is

recorded in Quarter 4 of 2021 as 1.09MW while the lowest is 0.27MW in quarter 2 of 2020. This is also below the installed capacity of Electro-Maxx of 8.28MW.

Additionally, the Committee noted that the Power Purchase Agreement issued to Electro-Maxx under Part A2 on minimum dispatch for Arua states that:

"The minimum dispatch for Arua shall be 3MW. Any minimum dispatch above 3MW shall be subjected to the approval of the Authority."

As observed above, Electro-Maxx did not dispatch its minimum required power of 3MW and there was no evidence submitted to the Committee that it received any authorization from ERA to generate beyond 3MW.

Further, quoting the Report of the Determination of Tariff Performance Parameters for the Period 2020 to 2023 for West Nile Rural Electrification Company Ltd, ERA states that:

"*Electro-Maxx in the interim installed 4.1MVA (3.2MW) diesel generators to operate as the process of decommissioning the 8MW generators from Tororo and ship them to West Nile is being completed. Electro-Maxx plant until 2020 was generating less than 1MW using diesel based generators due to logistical challenges. Nonetheless, the generation capacity was enhanced at the beginning of March, 2022 and can generate up to 3.28MW of thermal electricity once the fuel is availed. Further still, Electro-Maxx completed the decommissioning of the 8MW HFO units in Tororo and was expected to be in full operation by August 2020.*"

Electricity Regulatory Authority report on tariffs is in agreement with the Committee's observation that Electro-Maxx's generation capacity of 3MW as per PPA was not achieved. Apart from the 1.09MW reported in quarter 4 of 2021, Electro-Maxx for the period 2015 to 2021 did not generate beyond 1MW.

The Committee also notes that despite these low dispatches, ERA never sanctioned the generators.

Recommendations:

The Committee recommends that:

i. ***The AG should carry out a forensic audit of the performance of WENRECO as per its terms in the power purchase agreement(s) and report back to Parliament in three (3) months from the date of reading of this report.***

ii. ***Electro-Maxx's contract to relocate 8MW of its 50MW contracted capacity at Tororo to Arua be terminated due to failure to meet its obligations.***

iii. ***The MEMD should sanction ERA for failure to give oversight to the electricity generators in West Nile and any losses occasioned from such failure.***

iv. ***ERA should provide effective oversight to the generators in West Nile to ensure they dispatch electricity as per their contracts.***

4.3 Prayers 1, 6 and 7 on: providing funds to UNOC; carrying out of a forensic audit on Electro-Maxx; and carrying out a compliance audit on the Electricity Regulatory Authority in relation to its operations on Electro-Maxx and WENRECO respectively.

In consideration of the three prayers, the Committee investigated the operations of Electro-Maxx and made observations on their electricity dispatches, payments on uninstalled capacity, their operations and financial health and the role of ERA in supervising Electro-Maxx. The Committee makes the following observations:

4.3.1 Electricity Dispatches by Electro-Maxx

Electro-Maxx is the first indigenous privately-owned power generating company in Uganda operating a thermal power plant with a licensed capacity of 50MW in Tororo which electricity is sold to the national grid[4]. Following the constant failure by

[4] https://kibo-capital.com/cases/Electro-Maxx/

WENRECO to consistently supply power in West Nile, Electro-Maxx installed thermal generators to supplement power generation in the West Nile sub-region in 2019. The Power Purchase Agreement between Uganda Electricity Transmission Company Limited (UETCL) and Electro-Maxx was amended to allow for relocation of 8.28MW to West Nile sub-region.

Although there is indication that Electro-Maxx relocated its 8.28MW[5], this amount is not reflected in the power it generates as shown in table 1, figure 2 below and table B.2 in Annex 2.

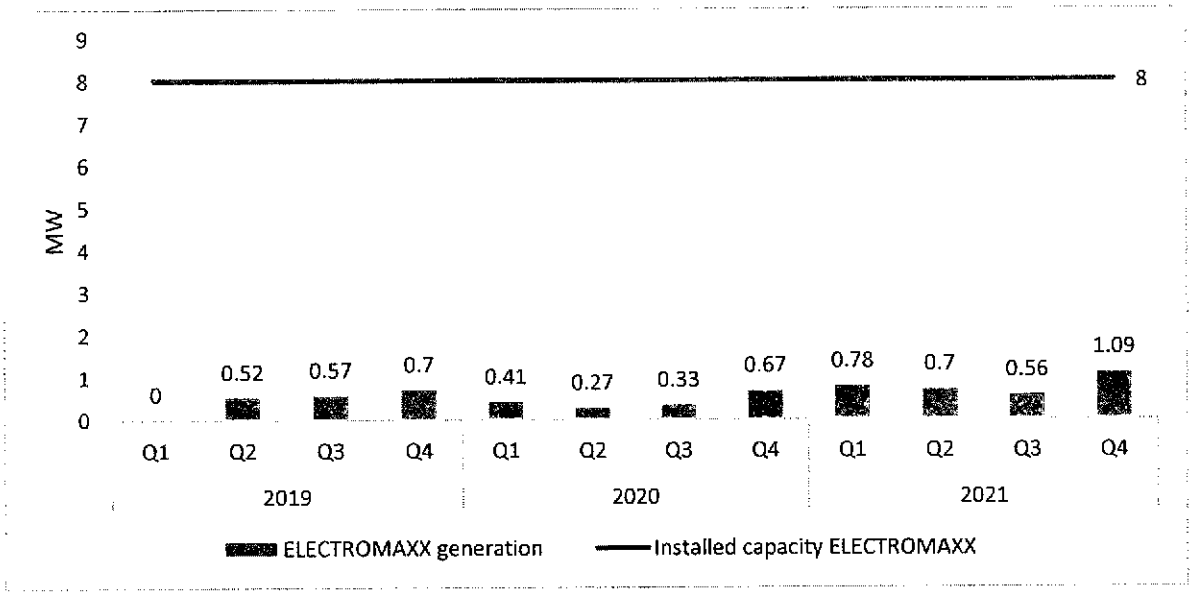


Figure 2: Electro-Maxx Generation Profile

Further, because Electro-Maxx requires permission to generate more than 3MW, such permissions have not been provided to the Committee and are also not reflected in its generation history, (that is, from the figures above, Electro-Maxx has not generated 3MW before) which further agrees with the Committee's observation on that Electro-Maxx is dispatching below its installed capacity.

ERA didn't sanction Electro-Maxx for failure to dispatch electricity as per PPA.

Recommendations:

[5] UETCL indicates the tested capacity as 6.53MW.

The Committee reiterates its earlier recommendations that:

i. ***Electro-Maxx's contract to relocate 8.28MW of its 50MW contracted capacity at Tororo to Arua be terminated due to failure to meet its obligations.***

ii. ***The MEMD should sanction ERA for failure to give oversight to the electricity generators in West Nile and for any losses occasioned from such failure.***

iii. ***ERA should provide effective oversight to the generators in West Nile to ensure they dispatch energy as per their contracts.***

4.3.2 Payments for Uninstalled Capacity at Arua

According to the Auditor General's report, Electro-Maxx was allowed relocation and civil works at a cost of USD 3.4m recoverable in equal monthly installments of USD 114,951 starting from July 2019 to September 2021. The agreement also required UETCL to pay capacity charges and finance costs to Electro-Maxx for the plant in Arua. The Auditor General's report for FY 2019/20 indicated that only 3.8MW was installed at Arua as per the amended PPA. The firm however billed UETCL UGX 3.052 billion for capacity charges at 8 MW instead of 3.8 MW for the period July 2019 to June 2020 thus leading to an over payment of UGX 1.602 billion by UETCL[6].

However, the Power Purchase Agreement provides for a mechanism for recovery of such amounts and scenarios.

The Committee observed that under part C2 (b) of the 2nd amendment of the PPA Electro-Maxx was allowed financing costs for recovery of relocation costs, civil works and cost of capital in respect to the generation facility at Arua which was supposed to be 8.28MW. According to UETCL, as at 21st December 2021, the installed capacity is 6.5MW[7].

Recommendations:

[6] Report of the Auditor General to Parliament for the Financial Year Ended 30th June 2020.
[7] Brief to the Parliament Committee on Environment and Natural Resources, 27th September 2022.

The Committee recommends that;

i. ***Mechanisms to recover over paid amounts should be applied and Electro-Maxx should reimburse GoU the amount of money overpaid as noted in the Auditor General's report.***
ii. ***The AG should do the reconciliations and follow up on any over payments that could have been made.***

4.3.3 Fuel shortages

Electro-Maxx has been having challenges of inconsistent fuel supply, which has enormously affected their generation capacity. The Committee was informed that between 2nd and 16th December 2021, there was no electricity supply from Electro-Maxx due to fuel shortages to the extent that on 14th December 2021, WENRECO purchased 284,284 litres of diesel for Electro-Maxx to be able to generate power during the festive season.

The Committee further notes that an Agreement of Reimbursement was signed between Electro-Maxx and WENRECO on 14th December 2021. Electro-Maxx was to reimburse WENRECO UGX 1.12 bn for the fuel purchased and a fuel surcharge of UGX 65 million. This was to be done in 3 (three) equal monthly installments commencing end of December 2021.

The Committee observes that Electro-Maxx, the licensed thermal power generator cannot operate at full capacity due to lack of adequate and consistent fuel supply despite all their invoices of up to July 2022 having been paid by UETCL. This has been attributed to delayed procurement of fuel, financial challenges to purchase fuel in addition to the increase in fuel prices on the market.

Additionally, at the Committee's visit to the generating facility, it was observed that Electro-Maxx had a storage of up to 75,000 litres of fuel at site. Lack of sufficient storage capacity aggravates the ability of Electro-Maxx to cushion itself from supply shortfalls and logistical challenges.

4.3.4 Failure to Pay Local Fuel Suppliers and Financial Health of Electro-Maxx

4.3.4.1 Fuel Supply Arrears

Electro-Maxx has outstanding debts with local fuel suppliers in Arua such as FAL Oil Uganda Limited whose documentation showed an outstanding cumulative debt of UGX 252, 400,000/= from 21st January 2021 to 23rd March 2022. However, the total outstanding debt submitted by Electro-Maxx to the Committee as shown in Table 2 amounts to over UGX 5 Billion. This indicates that the Company cannot sustainably carry out its operations, despite the fact that Government through UEGCL honored its obligations in time.

Table 2: Outstanding list of diesel suppliers as at 31st July 2022

S/N	Supplier	Amount in Due (UGX)
1.	WENRECO	1,567,130,720
2.	FAL Oil Uganda Limited	252,000,000
3.	Maxol Uganda Limited	3,214,357,761
4.	Express Ways Uganda Limited	500,212,900
	Total	**5,533,701,381**

Source: MEMD

4.3.4.2 Electro-Maxx's Financial Health

According to the Electro-Maxx statement of financial health submitted to the Committee, the total liabilities or financial obligations of the company amounted to USD 31.25 million as at 31st December 2021. Of these, USD 15.34 million were non-current liabilities implying that they are not expected to be settled within one year while current liabilities expected to be settled within one year were USD 15.92 million. This therefore indicates a company in financial distress.

The Committee therefore notes that given the fore going challenges occasioned by Electro-Maxx's financial health, it has been unable to meet its contractual obligations of supplying 8.28MW of electricity. Although it was one of the prayers of the movers of the motion that Uganda National Oil Company (UNOC) is funded to supply diesel to Electro-Maxx, the energy payment component that UETCL pays to Electro- Maxx already covers costs of fuel logistics. With Electro-Maxx having no outstanding payment from Government but still failing to provide fuel reinforces the Committee's

observation that Electro-Maxx is having its financial troubles, which GoU should not be obligated to solve. It is therefore upon this that the Committee makes the following recommendations:

Recommendations:

The Committee recommends that;

i. **The prayer by the movers of the motion that MEMD urgently provides funds to UNOC to supply fuel to Electro-Maxx is not tenable.**
ii. **The Committee reiterates the earlier position on termination of the contract of Electro-Maxx.**
iii. **Government of Uganda/UEDCL should expedite the construction and energizing of the 33kV line from Olwiyo to Pakwach as a short-term alternative to addressing electricity supply challenges in West Nile.**

Therefore, the Committee in its recommendations agrees with prayers 6 and 7 that the Auditor General should carry out a forensic audit on Electro-Maxx; and carry out a compliance audit on the Electricity Regulatory Authority in relation to its operations on Electro-Maxx and WENRECO respectively but disagrees with prayer 1 (one) in the Motion that MEMD should fund UNOC to supply fuel to Electro-Maxx to generate the licensed 8.28MW.

4.4 Prayer 3(b), 5, and 7 on: replacing the second turbine at Nyagak I to generate 3.5MW, intensifying expansion of the distribution network in West Nile; and carrying out a compliance audit on ERA in relation to Electro-Maxx and WENRECO

To fully address these prayers, the Committee considered the scope of operation of WENRECO. It scrutinized aspects such as its licenses, its operations at Nyagak I, the facility it generates from, electricity dispatches from Nyagak I, Turbine breakdown and downtime, Corporate Social Responsibility Initiatives, the extent of the distribution network in terms of customers and length of network as well as reasons for the power outages and load shedding. The Committee makes the following observations:

4.4.1 Operations of WENRECO

On March 2003, ERA issued Licence Number 019 to WENRECO to construct, own and operate a power generation facility, distribute and sell the generated electricity in the Districts of West Nile. The licence was for a duration of 25 years. WENRECO took over what was previously Uganda Electricity Board's infrastructure but later decommissioned the Heavy Fuel Oil (HFO) generators after the commissioning of Nyagak I, which it now operates.

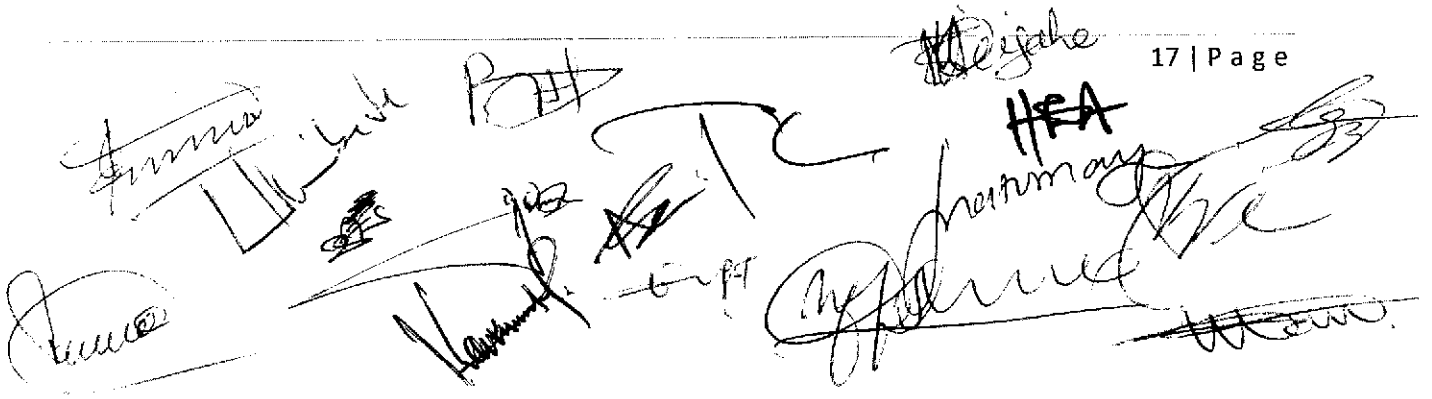
4.4.2 Nyagak I

Nyagak I Hydro Power station is a 3.5 MW plant located along the Nyagak River, in Nyapea Sub-county, Okoro County, Zombo District, in West Nile sub-region. In order to evacuate power from Nyagak I, GoU built an 80km 33kV medium voltage line between Nebbi and Arua and the Vurra line to improve reliability and access loads along the way to Arua. Construction of this project started in 2006 and was commissioned in September 2012. The project cost USD 18 million, for the construction of the HPP, and USD 15 Million for the construction of the interconnection lines.

4.4.3 Scope of the Project

According to the project completion report of Nyagak I, the main features of the project are a concrete gravity weir with an intake near the left abutment leading to a 750m long headrace conduit, a surge tank and 460 m long steel penstock to divert water to the surface powerhouse. The powerhouse has installed two horizontal Francis turbine units of 1.8MW capacity each.

The Committee in its meeting with the community in Zombo District was informed that; as part of the scope of the project, an access road and bridge were to be constructed to ease access to the HPP. However, at the time of the Committee's visit in August 2022 these had not been constructed despite the project having been commissioned 10 years earlier, in 2012. Community leaders informed the Committee that all project affected persons had been fully compensated.



In a follow-up meeting with the MEMD and its agencies, the Committee was informed that construction of the access road and bridge were never part of the obligations of the Contractor. The Committee however notes that there is still need for the access road and bridge to be completed so as to ease accessibility to the hydro power plant. The MEMD indicated that the Ministry of Works and Transport and Uganda National Roads Authority (UNRA) had been engaged concerning construction of the access road and bridge.

Recommendations:

The Committee recommends that:

i. **As part of the audit requested for by the movers of the motion, the Auditor General should report to Parliament on the financial performance of the funds used to construct Nyagak I, including attainment of project scope.**

ii. **The responsible entities (UNRA, MOWT, MEMD and WENRECO) should expedite the construction of the access road and bridge at Nyagak I to ease movement to the HPP.**

4.4.4 Electricity Dispatches for Nyagak I

As already indicated in Table 1 above, Nyagak I is producing below its installed capacity. Table 1, table B.2 in Annex 2 and figure 3 give a more detailed breakdown of the power dispatches for Nyagak I from 2012 to 2021.

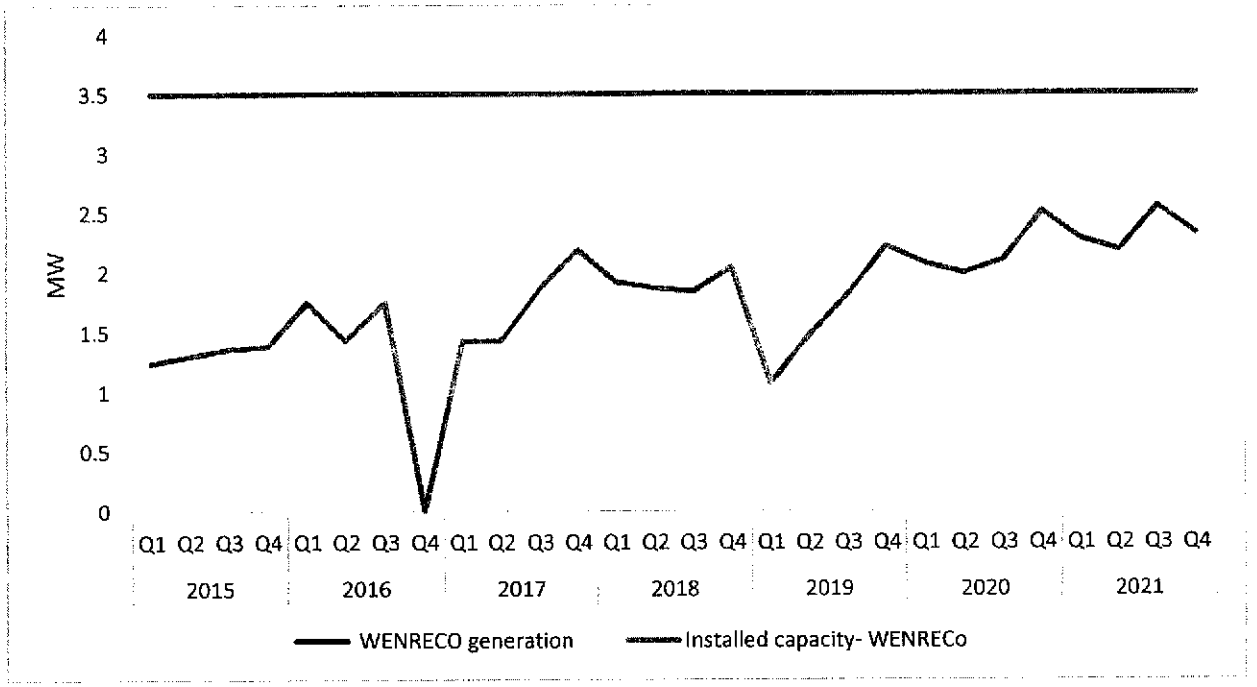


Figure 3: WENRECO Generation Profile

According to the ERA database figures, the highest average power dispatch recorded for Nyagak I is 2.55MW in quarter 3 of 2021. Whereas it is expected that the generating facility will not produce up to its nameplate capacity (installed capacity) due to machine inefficiencies, the Committee notes that the average efficiency of the Nyagak I is averagely 57%[8]. This is low as compared to world averages of 90 % for HPP[9].

Although the installed capacity of Nyagak I is 3.5MW, the actual energy produced is below installed capacity and is averagely 1.8MW for the period 2015 to 2021. Despite producing below capacity, ERA does not sanction WENRECO for underperformance.

Recommendations:

The Committee recommends that;

i. ***The AG should audit the compliance of the parties in execution of the Power Purchase Agreement and make recommendations to***

[8] Considering average output of 1.97MW for Nyagak I (Overall Efficiency= output/ input (nameplate capacity)*100)
[9] https://www.usbr.gov/power/edu/pamphlet.pdf

Parliament within three months of reading of this report, which will inform the decision on the action to be taken regarding WENRECO's licence.

ii. ***The MEMD should sanction ERA for failure to give oversight to the electricity generators in West Nile and any losses occasioned from such failure.***

iii. ***ERA and UEDCL should supervise the operations of WENRECO and ensure that subcontracted quantities are delivered to the West Nile Grid.***

4.4.5 Breakdown of Turbine 2

It was established that between 1st December 2021 and 22nd August 2022, Turbine 2 was unavailable for 143.3 days, which translates to 3439.28 hours. It was operational for 121.2 days, equivalent to 2908.72 hours. For this period, the Committee observes that the Unit was off for a longer time than it was on, which affected the available energy dispatched to the grid. The Committee was informed that the break down was a result of trying to synchronize the thermal (from Electro-Maxx) and hydroelectric power sources (from Nyagak I), which damaged the Turbine.

Attempts were made to repair the failed generator unit from the Mechanical Workshop of Uganda Railway Corporation (URC) which efforts were not successful. This necessitated shipping of the unit to Nairobi, Kenya for over a month for repairs. On return, the generator unit worked properly for a short time (5 days) and then failed after which a decision was made by WENRECO to import a new unit while the faulty unit was being repaired from URC.

The Committee observed that the faulty unit had been successfully repaired and was operational starting from 10th August 2022. The Committee also noted that there was conflict as to whether the faulty turbine had been repaired or a new one bought. The Committee was able to establish that the faulty unit had been repaired but no new unit had been secured.

At the time of the Committee's visit, Unit 2 was operating at 0.95MWh while Unit one was running at 1.2MWh, which were attributed to demand on the HPP at the time of the visit. Whether the repaired Unit could come close to delivery of its original installed capacity of 1.75MW could not be ascertained at this point.

Although the installed capacity of Nyagak I is 3.5MW, the actual power is averagely 1.8MW for the period 2015 to 2021 and does not necessitate the two turbines to operate at full capacity. The Committee however notes that ERA holds WENRECO accountable for non-dispatch of the contracted capacity.

Recommendations:

The Committee recommends that;

i. ***The Committee recommends that the actual generation capacity of Nyagak I be assessed and established so as to ascertain available supply potential for West Nile. ERA and the Office of the Auditor General should report back on this as part of the audit.***

ii. ***WENRECO should ensure that it meets its electricity supply commitments as per signed agreements.***

iii. ***ERA should put in place and enforce performance standards for WENRECO in terms of energy dispatched, down time etc. These should be backed up with incentives and penalties for performance and non-performance as a way of ensuring compliance.***

4.4.6 Distribution Network in West Nile

The Committee observes that at the point of handover in 2017, the 33kV backbone in West Nile was 309.16km and 334km in August 2022, representing an increment of 8% in 5 years. The T-offs on the other hand increased from 50.183km[10] in 2017 to 279km in 2022 indicating an increment of 332% in 5 years. The Committee observes that the dismal increase in 33kV backbone

[10] Operations and Management Agreement between WENRECO and UEDCL

means that little progress is made towards connecting new areas. Although the T-offs have increased the energy access rates in the region remain low.

Overall, energy access in West Nile remains low, with majority of the districts in the region having between 0.5 to 8% households using electricity for lighting[11] as compared to the national electricity access rate of 28.9%[12]. The Committee further notes that although electricity access in West Nile falls short of the national averages, it also fails to meet the aspirations of the Electricity Connections Policy which targets to achieve 26% rural access target by 2022, 30% national coverage target by 2020, access rate of 60% by 2027 and eventual connection rate of 80% by 2040[13].

Recommendations:

The Committee recommends that;

i. ***Government of Uganda extends electricity to all districts of West Nile region to meet the electrification targets enshrined in the Electricity Connections Policy***

ii. ***Further investment should be made by Government through MEMD under the Rural Electrification Programme to increase energy access in West Nile and to meet the suppressed demand of 5MW.***

4.4.7 Number of customers connected in West Nile

The total number of customers on the West Nile power Network is as shown in table 3.

[11] Electricity Access per subcounty Accessed at: https://uetcl.maps.arcgis.com/apps/View/index.html?appid=9cbf01357d234df5b979e53dfa9aa5c2

[12] International Energy Agency at: https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity

[13] The Connections Policy of Uganda 2018-2027

Table 3: WENRECO Customer Numbers from 2003 to 2022

Year	Domestic	Commercial	Medium Industrial	Large Industrial	Total
2003	563	368	1	-	932
2012	1659	1679	1	-	3339
2014	3530	2731	7	-	6268
2016	5382	4149	13	-	9544
2018	8823	6627	34	-	15484
2020	19884	453	22	2	20361
2022	21308	500	31	2	21841

Source: WENRECO

The total number of customers has been increasing over the years with 932 in 2003 to the current 21,841 in 2022. Whereas all categories of consumers over the years have kept on increasing, for the period 2020 to 2022 the number of commercial consumers declined from 6,627 to 453. However, the region also registered its first large industrial consumers in 2020[14]. It was further noted that medium industrial consumers increased to 31 in a period of 19 years which figure is too low and therefore indicates that there is little demand for electricity for industrialization in the region.

Recommendations:

The Committee recommends that:

i. ***Electrification programmes should be intensified to capture all suppressed demand, which in turn will increase the number of customers.***

ii. **GoU should give incentives such as providing subsidized electricity to industrial parks in Arua so as to encourage increase in number of medium industrial and large industrial customers.**

[14] Domestic consumers : low voltage single phase supplied at 240 volts; Commercial consumers: three phase low voltage load not exceeding 100 amperes; Medium industrial consumers: low voltage 415 volts, with maximum demand up to 500 kva large industrial consumers: high voltage 11,000 volts or 33,000 volts, with maximum demand exceeding 500 kva but up to 1,500 kva
Extra - large industrial consumers: high voltage 11,000 v or 33,000 v, with average demand of at least 1,500 kva and dealing in manufacturing

4.4.8 Power outages

During the various meetings held with Electricity Service Providers in West Nile, the following were advanced as reasons for the rampant power outages:

i. A poorly designed distribution network that is susceptible to rampant lightning strikes. The Committee was informed that the distribution line did not have requisite earthing protection which exposed it to lightning strikes.

ii. The distribution network in West Nile region is of radial design, which makes it hard to isolate problem areas thus causing widespread load shedding in case of faults. A radial system is a system having a single path over which current may flow for a part or all of the way from the distribution substation or substations to the primary of any distribution transformer.

WENRECO expressed concerns on the need to change the current design of the distribution network as it does not provide room for redundancies in case of any fault on the supply line, which affects all the customers associated with the line. However progress in creating alternative loops has been made especially on the 33kV line from Nyagak I.

iii. The coming on board of the extra capacity from Electro-Maxx created synchronization challenges. The West Nile Grid before 2019 was powered by one hydro source from Nyagak I, operated by WENRECO. However, due to increased demand, Electro-Maxx was brought on board to increase generation capacity in West Nile using diesel generators. The meeting was informed that Nyagak I, during the day supplies areas of Nebbi and Pakwach while Electro-Maxx supplies the Arua circuit. After 11pm when the demand is low, there is switch over of the Electro-Maxx service area and it is serviced by Nyagak I up to 6:00am when the switch back to Electro-Maxx is made. It is hard to synchronise the two sources of electricity to operate simultaneously. This has caused load shedding during load changeover.

iv. Also reported were cases of interference from overgrown vegetation along the line coupled with persons that had settled under the line that needed to be evacuated. Nonetheless, WENRECO had embarked on an exercise to clear vegetation under the lines.

v. WENRECO also reported cases of poor quality wiring in domestic facilities, which was a result of poorly trained electricians.

vi. There were also reported cases of poles falling down.

vii. Intermittent supply of diesel as a result of increased costs on the global market, which has affected the generation by Electro-Maxx.

viii. The seasonality of River Nyagak affects the available water for power generation throughout the year. This is exacerbated in cases of drought such as the period of 2017 and 2018 where generation capacities were low.

The Committee was informed that synchronization of the two power sources had resulted into faults from the distribution network. Although Electro-Maxx protected its generators with a "gate", Nyagak I did not have protection and its turbine had succumbed to damages occasioned from the faults in the distribution network. This protection was unavailable because funds for it had not been approved by ERA. The Committee at the writing of this report had not received a report or request for this investment plan and request for funds.

The Committee notes that the West Nile Grid is operated in island mode, where Nyagak I during the peak hours supplies the Nebbi circuit while Electro-Maxx operates the Arua circuit and there are no overlaps. Further the design of Nyagak I HPP did not cater for synchronization and therefore the two sources cannot be synchronized. However the manual changeover at 11:00pm and 6:00am causes the distribution network to trip as the changes in circuit operation are effected. The Committee notes that whereas switch over happens at specific times, load shedding should only be at such times, however this is not the case, as the load shedding in West Nile is more rampant to be attributed to system changeover.

The other reasons advanced above in i), iv), v) vi) and viii) are also occasional and may not explain the daily outages. Moreover, WENRECO's line clearance costs of UGX 97.13 million for clearing lines for up to 1.3 times in 2022 were approved by ERA. This therefore leaves a poorly designed distribution network and capacity challenges as the probable significant reasons for the load shedding. However, WENRECO entered an Operations and Management Agreement with UEDCL on the 27th February 2017. Under Article 8 of the Agreement, UEDCL was on the transfer date to handover

UEDCL assets in West Nile to WENRECO in a substantially good condition as verified by UEDCL and WENRECO. By signing the Operations and Management Agreement, WENRECO confirmed that the network was substantially in good condition since both UEDCL and WENRECO verified its condition as per Article 8 of the Agreement and UEDCL had revamped this network using funds from kfW and GoU prior to handing it over to WENRECO. It was also expected that WENRECO would provide semi-annual reports on the status of UEDCL assets in west Nile and where system improvements or extensions were required these would be submitted as required under Article 7. The challenges of a poorly designed network can therefore be attributed to failure by WENRECO to submit these reports or failure by UEDCL and MEMD to supervise works or permit investment in the network. An attempt to secure information on these by the Committee was futile.

The Committee also notes that although Electro-Maxx relies on diesel to generate its power, the storage capacity at the plant is 75,000 litres only. This therefore necessitates that the facility is supplied by truck more frequently. As stated earlier, both Electro-Maxx and WENRECO are not dispatching close to their installed capacity, and are dispatching below peak demand for the region, which is the major cause of load shedding in the region.

Recommendations:

The Committee recommends that;

i. ***WENRECO in conjunction with UEDCL and ERA should put in place appropriate protection mechanisms in the power distribution networks to safe guard the power generators. These may include circuit breakers, fuses or as the network designers may advice with the approval of ERA and UEDCL.***

ii. ***UETCL and MEMD should expedite the completion of the substations in West Nile as these have controls that protect the generation, transmission and distribution infrastructure and facilitate synchronization of power from the two power sources.***

iii. ***ERA and UEDCL should ensure automation of generation, transmission and distribution infrastructure with appropriate advanced control technologies such as programmable logic controllers or Supervisory Control and Data Acquisition (SCADA) systems to allow for real time monitoring, gathering, processing of network information locally and remotely.***

iv. ***ERA should assess and approve funding for network improvement designs to protect the distribution lines from lightning and create redundancy.***

v. ***WENRECO should clear all vegetation along network lines and maintain it at all times to prevent interference.***

vi. ***ERA should establish stringent measures for certifying and issuing permits to electricians to ensure safe and reliable electrical installations.***

vii. ***WENRECO should constitute post wiring monitoring mechanisms to ensure quality control of the distribution network.***

viii. ***The MEMD and other relevant stakeholders should organize sensitization campaigns in the communities on the need to use well-trained and certified electricians to undertake electrical installations in their premises.***

ix. ***WENRECO should ensure that where poles have been damaged, they are replaced with immediate effect as per the signed agreement, using those meeting quality requirements.***

x. **The supervising entities, that is; UEDCL and MEMD should ensure that all reports concerning the West Nile electricity distribution network are submitted as per requirements of the Agreement and scrutinized in time to guide decision making in regard to investment and design approvals for the grid.**

xi. **ERA should give oversight supervision to UEDCL and WENRECO to ensure that they meet their contractual obligations as specified in the Agreement.**

4.4.9 Community Development Action Plan and Corporate Social Responsibility

The establishment of WENRECO targeted electrification of 30 Health Centers, 60 Schools, 250 Businesses, and 6,000 Households between 2013 and 2015. In Zombo, an access road, boreholes and electrification of the traditional leader's palace among other projects were to be carried out as part of their Corporate Social Responsibility. The Local council leaders reported that these activities are yet to be completed.

Recommendation:

The Committee recommends that;

i. ***The Committee recommends that WENRECO and MEMD should establish modalities to complete the pending CSR and CDAP activities.***

4.4.10 Environmental Management of River Nyagak

The Committee was informed that the volume of water in River Nyagak is affected by changes in seasons thereby limiting the amount of electricity generated. While interacting with the National Environment Management Authority (NEMA) on the sufficiency of the river to provide adequate flows for electricity generation, Members were informed that the average flow rate of the river was 8.14m³/s against 6.8m³/s that is required for generation. NEMA indicated that the volumes in the river did not affect generation throughout the year. Exceptions were made for 2016 where a drought affected the water volumes in the river. On the other hand, MEMD insisted that water flows affected the generation capacity of the HPP. However, at the time of writing this report the Directorate responsible for Water Resources had not given a position on the adequacy of water flows.

The Committee also observed that the riverbanks were not being properly maintained as evidenced by multiple agricultural activities, which make the river banks highly susceptible to erosion. NEMA indicated that environmental audits on Nyagak I were carried out but are irregular. Overall from results of previous Environmental Impact Assessments, the footprint of the project was small and is located in a sparsely populated area, thus reducing the negative environmental impacts.

The Committee further observed that Nyagak I operates below its installed capacity in spite of the water volumes. Although the Uganda Government has put in place measures to protect its riverbanks, the source of river Nyagak is in the Democratic Republic of Congo (DRC). Ugandan Authorities have no jurisdiction to enforce environmental safeguards on the river at its source since there are no formal cross border collaborations between Uganda and DRC for the conservation and management of this river.

Recommendation:

The Committee recommends that;

i. ***The Ministry of Energy and Mineral Development, the Ministry of Water and Environment and the Ministry responsible for East African Community Affairs establish collaboration with DRC for joint conservation drives along the river.***
ii. ***NEMA, MWE and WENRECO should ensure that the Environment Management Plan for the HPP is implemented.***
iii. ***NEMA and WENRECO should carry out routine environmental audits to ensure that the river is protected from degradation.***
iv. ***Given the hydrological challenges of River Nyagak and the impact of climate change, the Committee also recommends that climate resilience measures be adopted for the hydropower plant to ensure sustainable water availability.***
v. ***ERA should provide effective oversight to the operations of the independent power generators in West Nile to ensure they dispatch energy as per their contracts.***

The Committee therefore agrees with the petitioner's prayers in 3(b), 5 and 7 on replacing the second Turbine at Nyagak I to generate 3.5MW; intensifying expansion of the distribution network in West Nile; and carrying out a compliance audit on ERA in relation to Electro-Maxx and WENRECO

4.5 Prayer 3 (a) Government to avail all the required funds to speed up completion of the 6.6 MW at Nyagak III.

To fully address this prayer, the Committee considered the status of ongoing works at Nyagak III including background information, physical and financial performance, power evacuation line, RAP and CSR.

4.5.1 Background Information of Nyagak III

Nyagak III is a 6.6 MW Hydropower project located on Nyagak River in Paidha sub-county Zombo District. It is a Public Private Partnership project implemented through the Special Purpose Vehicle (SPV) - Genmax Nyagak Limited formed between Uganda Electricity Generation Company Limited (UEGCL) and a private sector partnership consortium of Hydromax Limited and Dott Services Limited. The project scope involves the construction of 6.6 MW Nyagak III small hydropower plant and the construction of 25km of 33kV interconnection line terminating at the switch yard of Nyagak I.[15]

The procured private partner is expected to manage the design, construction and operation of the generation plant for 20 years and thereafter, the management of the plant will be transferred to UEGCL.

Implementing Agency: Uganda Electricity Generation Company Limited

Project Duration: 33 months

Project Cost: UGX 67.2 billion

Funding Agency: GoU and Strategic Partner (Hydromax & Dott)

Project Management Consultant (PMC): GOPA International Energy Consultants

Project completion date: Was to be commissioned in 2018, now pushed to March 2023.

4.5.2 Physical Performance of Nyagak III

[15] Ministry of Finance, Planning, and Economic Development. Semi-Annual Budget Monitoring Report for the Ministry of Energy and Mineral Development for the FY 2020/2021.

As of July 2022, planned and actual performance of Nyagak III was as indicated in table 6.

Table 4: Physical progress of Nyagak III

	Key Component	Planned Progress (%)	Progress by end of July 2022(%)
1.	Power House and Switchyard	82	18
2.	Surge Tank	100	85
3.	Pipe Conduit	100	90
4.	Dam and intake	100	90
5.	Penstock	100	68

Source: MEMD

Overall the construction of the 6.6MW Nyagak III hydropower plant stands at 70.1% as of August, 2022 and is expected to be completed in March, 2023. Most of the components progress is lagging behind, with the powerhouse and switchyard lagging the most. (See Annex 3)

Further, according to the developer's project implementation schedule, the installation of the turbines and related systems was scheduled to start on April 18th 2022 and thereafter, the planned commercial operations date was to be September 30th 2022.

However, by May 2022, the manufacturing of the turbines in India had not started. This was as a result of delays in funding, which have affected the commencement of design works on the turbines and consequently their shipping and installment at the HPP.

Recommendations:

The Committee recommends that;

i. ***All pending works for construction and installation of equipment should be fast tracked to achieve commissioning of the plant in March 2023.***

ii. ***Funds required to achieve these milestones should be front-loaded.***

4.5.3 Power Evacuation Line (33kV)

In a meeting held with the MEMD, the Committee was informed that the evacuation line from Nyagak III was a 33kV line measuring 25km, starting at Nyagak III and connecting to the switchyard at Nyagak I and thereafter to the existing medium voltage lines already in place. The project implementation plan initially scheduled the line related activities to commence in January 2018 with the line commissioning in January 2019. The Ministry indicated that some of these delays were attributed to lack of funds of up to UGX 24 billion required by December 2022 in order to complete the project by March 2023. (GoU has disbursed USD 2.8 million of its required USD 9.2 million as of May 2022)

The Committee observes that as of August 2022, during its visit to the plant, erection of the evacuation line had not commenced despite the dam facility being at 70% level of completion. Although the commissioning date of the project was extended, the activities related to the evacuation line (i.e. procurement and shipping; detailed design and engineering; construction and commissioning) were scheduled to take 12 months. This implies that the segment is already 5 months behind the revised schedule.

Additionally, the Committee is concerned that completion of Nyagak III prior to completion of the transmission network could result into payments for deemed energy.

Recommendations:

The Committee recommends that;

i. ***The Ministry of Finance should release UGX 24 bn for project activities immediately in order for the project to be completed by March 2023.***

ii. ***All activities for the evacuation line should be fast tracked so as to meet new project timelines.***

iii. ***GoU should desist from committing its self to payment of deemed energy. Deemed energy clauses should not be included in future PPA agreements as they cause losses to Government.***

4.5.4 Resettlement Action Plan

UEGCL procured and contracted NEW PLAN Limited as a Resettlement Action Plan (RAP) Consultant to undertake the RAP for Nyagak III HPP. According to the Updated Valuation Report released by NEW PLAN Limited, the total compensation award is approximately UGX 1.327bn, which funds are required by the end of October, 2022. The Committee observed that failure to compensate the PAPs in time will delay the construction of the 33kV line from Nyagak I HPP to Nyagak III HPP.

Recommendations:

The Committee recommends that;

i. **Government should provide its outstanding UGX 24 bn to cover all project components. UGX 1.327 bn of Government's contribution should be released for compensation of PAPs along the evacuation line by the end of October 2022.**

4.5.5 Corporate Social Responsibility

Under the CSR projects planned for Nyagak III, UEGCL has completed procurement of a contractor to drill and install four community boreholes in four villages along the 33kV line corridor as agreed to in the stakeholder engagements with Zombo district local government, Ministry of Gender, Labour and Social Development, UEGCL and Genmaxx Nyagak Limited.

UEGCL has also completed the procurement of a contractor for construction of a community hall under the auspices of the Kaal Umua Chiefdom. Other planned projects include: a Community Health Center, a Primary School, Staff Quarters and Ventilated Improved Pit latrines subject to the availability of funding in FY 2023/24.

Recommendations:

The Committee recommends that;

i. ***UETCL and the joint Consortium should provide funds for the agreed upon community projects and these funds should be released in the expected timelines.***

ii. **Government avails the required funds to speed up completion of the 6.6MW at Nyagak III and therefore agrees with the petitioner's prayers in 3(a)**

4.6 Prayers 2 and 4 on: Expediting the construction of substations in Arua and Nebbi Districts and upgrading the existing electricity network in West Nile to distribute from National Grid Transmission line of 132kV by March 2023.

To fully address this prayer, the Committee gives background information on the ongoing 132kV transmission project under the Grid Expansion and Reinforcement Project, financial approvals and performance of the GERP, status of physical works on both transmission lines and substances with the challenges affecting them, changes in transmission line design, interconnectivity of GERP with other transmission projects and CSR of the project.

4.6.1 Overview of the Grid Expansion and Reinforcement Project

The Government of Uganda is implementing Grid Expansion and Reinforcement Project for Uganda with funding from World Bank whose objective is to increase availability and efficiency of bulk electricity supply in Northern and West Nile Region. It will interconnect the isolated West Nile distribution network to the main Transmission Grid. This project has three components[16] as follows:

[16] The World Bank (2016); International Development Association Project Appraisal document on a proposed credit in the amount SDR 71 (US 100 million equivalent) to the Republic of Uganda for the Grid Expansion and Reinforcement Project; Report no: PAD 1581

1. **Component 1: The Construction of transmission infrastructure consisting of three sub-components:**

   i. **The 132kV** double circuit running from Lira/Kole, through Gulu and Nebbi, to Arua. It also consists of short interconnections from the new substations at Gulu, Nebbi, and Arua to the nearest feasible connection points on the existing 33 kV network currently supplying power in these areas.

   ii. **Substation Works,** which include extension of the existing 132kV substation at Lira; a 132/33kV substation with two 40 MVA transformers at Gulu; 132/33kV substation with two 20 MVA transformers at Nebbi a 132/33kV substation with two 40 MVA transformers at Arua. Additionally, the design and construction of the substations at Gulu, Nebbi, and Arua has enough capacity and spare 33kV feeder panels to allow future distribution network expansion (rural electrification) and Energy Access Scale-up Program.

   iii. **Financing of Engineering Construction and Supervision Consultant** to assist UETCL with reviewing detailed designs, procurement of contracts, supervision of construction of the transmission line and substations, expertise transfer, training, supervision, monitoring of Environmental compliance; and the Resettlement Action Plan.

2. **Component 2: Project Implementation and Operational Support to Uganda Electricity Transmission Company Limited (UETCL)** which aims to support the UETCL to enhance its project implementation capacity, contract administration, and operational effectiveness through technical assistance and modernization of management systems.

3. **Component 3: The sectoral strengthening support**, which has a critical role to fulfill in policy formulation and strategy, planning, and coordination of the growing and increasingly complex electricity sector.

The Committee recognizes that the inception and timely completion of the GERP project is a major step towards achieving connectivity of West Nile to the National Grid and is paramount in ensuring that the Region and Northern Uganda receive adequate and reliable electricity to spur economic and industrial development.

It also applauds the design of the project in establishing a backbone high voltage transmission network in the region while at the same time providing for means to integrate it with low voltage distribution network to ease connectivity for the end users. This would ensure that the transmission line is connected to existing distribution infrastructure in a timely manner and will in the long run be beneficial towards increasing the availability and reliability of electricity to end-consumers in the project areas.

Recommendation:

The Committee recommends that;

i. ***To fully realize the envisaged benefits of this project, the Ministry of Finance, Planning and Economic Development, UETCL, MEMD with their consultants should consolidate all efforts to ensure that this project is completed and commissioned by March 2023.***

4.6.2 Initial Financial Approvals for the project

The Committee observed that the release of the finances has an impact on the implementation of the Project and thus it was necessary to assess the financial performance of the project. Proposed Cost and Financing for all the components were as shown in table 5 below.

Table 5: Project Cost and Financing

Project Financing	Project cost (US$ millions)	IDA Financing (US $ million)	GOU (US $ million)	% IDA Financing
Component A. Construction of transmission Infrastructure	**106.0**	**80.0**	**26.0**	
Transmission line (LGNA)	58.0	49.0	9.0	
Substation works including (33kV interconnector	30.0	25.0	5.0	**75**
Engineering and Construction supervision consultant	7.0	6.0	1.0	
RAP implementation	11.0	0	11.0	
Component B. Project Implementation and Operational Support to UETCL	**11.8**	**11.0**	**0.8**	
Capacity assessment and project implementation sport	5.0	4.5	0.5	**93**
UETCL systems modernization	5.8	5.5	0.3	
Biosafety off-set	1.0	1.0	0.0	
Component C. sectoral strengthening support	**4.0**	**3.5**	**0.5**	
Coordination and supervision of social safeguards	0.7	0.7	0.0	**88**
sector skill assessment	0.3	0.3	0.0	
sector skill strengthening program	3.0	2.5	0.5	
Unallocated	**5.5**	**5.5**		
Total Financing required	**127.3**	**100.0**	**27.3**	**79**

Source: The World Bank, Project Appraisal Document

On the 14th September 2016, Government requested Parliament to authorize the borrowing of up USD100.0 million from the International Development Association (IDA) to finance the GERP project. Parliament approved a loan of USD 96.28 million towards implementation of the GERP Project.

The Committee observed that the loan disbursement rate for the GERP Project after five years of loan commitment was only 60% i.e. USD 58.02 million was disbursed as

of 20th June 2022 and USD 38.2million remains undisbursed. This was because GoU failed to secure timely and sufficient counterpart funding for compensation and RAP implementation.

The Committee was informed that issues of delayed compensation are in the locations of Anaka, Pajengo and Pakwach Town Council. Thus the Committee observes that these cases if not addressed will impact negatively on the project implementation progress, the projected commissioning date of March 2023 and subsequently interrupt loan disbursements from the funder. By the time of writing this report, it was resolved by the MEMD and the PAPs represented by their lawyer that a Memorandum of Understanding be signed where commitments to address their issues will be handled as access to the work is granted.

Recommendations:

The Committee recommends that;

i. ***Loan approvals should be preceded with acquisition of the necessary Government funding and where necessary, procurement procedures should be fast tracked to avoid delays in the project.***
ii. ***Government of Uganda should secure its component of counterpart funding to facilitate loan disbursements.***
iii. ***Government should expeditiously fulfills its obligations under the MOU signed with the PAPs.***
iv. ***In future, for all Government projects, the schedule of implementation of projects should be strictly adhered to for all Government projects.***
v. **The MEMD should ensure that the project is completed within the stipulated time.**

4.6.3 Changes in approved designs

The Committee further notes that although the loan approval was for 314km[17] of transmission line, the current length of the line is 289km. In a presentation made to

[17] A Brief to Parliament on The Proposal To Borrow Up To SDR 71.0 Million (Us$ US$100 MILLION) From The International Development Association (Ida) To Finance The Grid Expansion And Reinforcement Project

the Committee, UETCL indicated the EPC model that UETCL has adopted for large transmission lines that involve the EPC contractor carrying out detailed designs after contract has been signed. It is at the detailed design stage that final quantities are confirmed; which includes the route alignment, profiling and tower spotting.
UETCL noted that after completion of the detailed design, the total number of pylons reduced from 900 to 897 (a reduction of 3) while the route length reduced from 295km to 289km.

The reduction in number of pylons was attributed to integration of Karuma- Lira line at Kole which required one additional pylon and design changes at the river Nile crossing that reduced the number of pylons from six (6) to two (2).

The Committee notes that although there was variation in length of transmission line and resultant pylons, no satisfactory explanation was given to explain the changes in the length of the line at loan approval stage at 314km to the eventual 289km. Further it is estimated that 3 pylons are required for each kilometer of this line. A reduction of transmission line from the loan approved length of 314km to 295km at feasibility study stage and finally to the 289km at detailed design stage should at the minimum have resulted into a reduction of at least 18 pylons and not just 3. The Committee further notes that this is an overdesign by the UETCL/ MEMD, which is an additional cost to GoU as the reduction in route and pylons does not in any way translate into a reduction in the amount of money borrowed in respect to the transmission line component of the project. UETCL however confirmed that any savings realized (from the three pylons) from the project will be utilized for supply of spares that will be used to maintain the line.

The World Bank (2016); International Development Association Project Appraisal document on a proposed credit in the amount SDR 71 (US 100 million equivalent) to the Republic of Uganda for the Grid Expansion and Reinforcement Project; Report no: PAD 1581. Pg 9

Recommendations:

The Committee recommends that;

i. **Auditor General should follow up on approved transmission project scope and its implementation on ground, in line with finances approved and released.**

ii. **The Auditor General should investigate the overdesign and its financial implication with the view of identifying the savings realized on the 25km of the line variation as per approved loan.**

iii. **Any savings realized should be used for loan repayments in line with the Public Finance Management Act.**

4.6.4 Status: Overall physical progress of works

The Committee established that the overall progress of the GERP project as of 17th August 2022 was 67% with the installation at 48%, procurement at 79% and design 97%. The breakdown of the different segments is as follows:

4.6.4.1 Transmission network

The progress of the transmission line is as in table 6 below:

Table 6: Status of Transmission lines, May and August 2022

No.	Name of line	line length (km)	Totals of Foundations/ towers	Foundations			Towers		
				Completed (May 2022)	Completed (Aug 2022)	Pending foundation to be constructed as of August 2022	Towers constructed erected (May 2022)**	Towers constructed and erected (Aug 2022)*	Pending towers to be erected as of August 2022
1.	Kole-Gulu	67	207	150	158	49	147	154	53
2.	Gulu-Olwiyo	57	179	99	104	75	88	93	86
3.	Olwiyo-Packwach	50	155	79	79	76	71	73	82

4.	Packwach - Nebbi	53	161	90	94	67		90	71
5.	Nebbi-Arua	63	194		93	101		79	115
6.	LILO Karuma-Lira	0.2	1			1			1
	Total	289	897	418	528	369	306	489	408

Source: Power Grid Corporation of India Limited Briefs to the Committee on 17/05/2022 and 17/08/2022

Out of the 897 foundations required for the 289 km transmission line, 528 (accounting for 58%) foundations have been completed and 369 are yet to be completed. For the towers, 489 (accounting for 54.5%) have been erected and 408 are pending.

The Committee observes that although the project is progressing, the rate at which the foundations are constructed and towers erected is low. For instance, for the Kole-Gulu segment of the line, when the Committee visited in May 2022, 150 foundations had been completed and 147 towers erected. In the presentation to the Committee three months later, for the same section, 158 foundations had been completed and 154 towers erected. This translates to eight (8) foundations for three months and seven towers in the same time duration. This trend also applies for the other sections of the transmission line. The Committee therefore observes that the rate at which these works are progressing is slow.

Recommendations:

The Committee recommends that;

i. **The Ministry of Energy and Mineral Development should ensure that the new deadline of 31st of March 2023 is duly observed.**
ii. **The project contractor should be routinely followed up and supervised by the MEMD to ensure that these works do not lag and are executed to completion within extended project timelines.**

iii. **Where contractors fail to meet project timelines according to the implementation schedule, penalties should be applied so as to discourage future delays on ongoing projects.**

4.6.4.2 Substations

The design and engineering works for the four substations were reported at 99% completion and procurement was at 77%.

Kole Substation: All switchyard equipment, lighting tower, water tank and shed foundations were complete. The control room was at 62% level of completion while lagging civil works were mainly on the additional scope covering transformer foundations and its ancillary structure at 10%. Installation works were also on track. Overall the physical status of works was at 66%.

Gulu substation: All switchyard equipment, water tank and shed foundations were complete with its lighting tower scheduled to be completed by end of August 2022. The control room was at 62% level of completion. Installation works were also on track. Overall the physical status of works was at 66%.

Nebbi Substation: All switchyard equipment, lighting tower, water tank and shed foundations were complete. The control room was at 60% level of completion while the installation works were also on track for completion. Overall physical status of works was at 67%.

Arua Substation: All switchyard equipment, lighting tower, water tank and shed foundations were complete. The control room was at 60% level of completion Installation works were generally on track. Overall physical status of works was at 67%.

The Committee notes that the works at the substations are progressing normally according to schedule.

Recommendation:

The Committee recommends that;

i. **The outstanding works at the substations should be completed by the Contractor as per revised schedule to have them commissioned by 31st March 2023.**

4.6.4.3 Challenges affecting the project: Transmission line

For the transmission line, the following challenges were observed on the transmission line:

i. In designing, some of the pile foundations were in swampy areas thus required alteration in design to make them suitable for setting up. The affected foundations were 18 along the Kole- Gulu stretch and 11 on the Gulu- Nebbi line.
ii. Also design challenges were encountered in areas that have hard rock thus necessitating further tests and design alterations. These have mainly affected the Kole- Gulu and Nebbi- Arua segments.
iii. There was also need to alter the tower designs at Nile River crossing so as to minimize its footprint. This would decrease the number of project affected persons and consequently compensation requirements.
iv. The project also reported manpower shortfalls for completion of the foundation works.
v. Delays in acquisition of project corridor due to delayed compensation of Project Affected Persons (PAPs). However, these have been resolved to allow the project to continue.
vi. Delayed stringing of the towers.

The Committee notes that there are a number of challenges that have still not been resolved on the line. These pose a danger to the completion of the project.

Recommendations:

The Committee recommends that;

i. ***The Contractor should mobilize additional staffing and increase working hours where possible so as to meet project targets. However, the quality of works should not be compromised in the process.***

ii. ***For continuous sections of completed towers, the stringing should commence.***

4.6.4.4 Challenges affecting the project: Substations

The following challenges were reported at substation works

i. Delays in works due to inadequacies in staffing, which necessitated mobilization of night shifts. The contractor however maintains that the works have picked up pace.

i. Delays in procurement, delivery and installation of control protection and telecom equipment.

The global shortage of microchips (which act as semi- conductors) resulting from increased global demand and logistics challenges occasioned by COVID-19 hampered works for the project. Alternative sources were established and the chips are expected in November 2022.

ii. Inadequacies in local supply of materials such as clad welding powder, zinc rich paint and epoxy materials for grouting.

Recommendation:

The Committee recommends that;

i. ***The contractor should ensure timely procurement of materials of the project so as to meet the deadline of March 2023.***

4.6.5 Interconnectivity of the GERP with other projects

The Kole-Gulu-Nebbi-Arua (KGNA) line is to be energized by Karuma HPP at Kole, by Achwa HPP at Gulu substation and is also connected to the 400kV Karuma- Olwiyo transmission line at Olwiyo substation (Part of the Karuma project). The Kole station may in future also be connected to the transmission infrastructure from Eastern Uganda. The interconnectivity of this project therefore depends on the completion of the Karuma HPP and the 132kV Lira- Gulu- Agago/ Achwa Transmission line and its associated substations.

The 132kV Lira- Gulu- Agago/Achwa transmission line as of 22nd August 2022 was reported to be at 44.7% level of completion, while the substations were at 19.7%. The project is expected to be commissioned by 30th March 2023.Delays in compensating PAPs partly contributed to lagging of this project. On the other hand, the 400kV Karuma- Olwiyo transmission line is 100% completed and was energized in June 2022.

The Committee observes that because the Lira-Gulu-Agago/Achwa transmission line and the Karuma HPP has been delayed, the current feasible option of energizing the transmission lines to West Nile is through the backbone transmission from Kawanda-Karuma-Olwiyo transmission lines and respective substations.

The MEMD has in the interim supported UEDCL to erect a medium 33 kV that would facilitate power evacuation to West Nile and is expected to be completed by the end of October 2022.

Overall, the Committee notes that the completion of Karuma HPP provides the lasting solution to reliable and sufficient energy for West Nile especially because alternative power from Achwa I and II will be dependent on water flows in the season River Achwa and competing load centres in Gulu and Lira.

Recommendations:

The Committee recommends that;

i. **The MEMD should fast track the completion of Lira- Gulu-Aragon/ Achwa transmission line by 30th March 2023 and commissioning of Karuma HPP.**

ii. **MEMD should ensure that all outstanding compensations for PAPs along the Lira-Gulu-Agago/Achwa power transmission line are expeditiously disposed of so that works on the line are not delayed.**

iii. **The MEMD should ensure that the 33kV line to Pakwach is completed and energized by November 2022 through the already existent transmission backbone from Kawanda to Karuma to Olwiyo.**

4.6.6 CDAP and CSR activities connected to GERP

The Committee was informed that community development projects were to be established in the areas where the different sub-stations and transmission lines were passing namely the districts of; Kole, Oyam, Nwoya, Pakwach, Nebbi, Arua City, Gulu and Lira and Arua City. These projects were to cover the sectors of Roads, Education, Water and Health. By the time of the Committee's visit to Arua substation, despite the considerable progress made with the Project, Corporate Social Responsibility activities were still lagging behind as commitments such as road construction had not been met.

There were also allegations by the local leaders that they had not been consulted in regards to Community Development Projects. Further, it was established that the contractor was backtracking on his commitment to deliver the physical projects and was giving insufficient amounts of money for the same to the Local Governments.

The Committee noted that although some activities were identified to be implemented in the host communities of the GERP project under CSR, they are yet to be implemented. The Committee further notes that the contractor needs to deliver physical projects rather than providing monies as these monies were found to be inadequate to fully execute the projects.

Recommendations:

The Committee recommends that;

i. ***Comprehensive consultation should be carried out among the communities and local leaders to identify the relevant project activities that are prioritized by the people before the projects are physically established.***
ii. ***The Corporate Social Responsibility Projects as agreed upon should be fast tracked and physically established in the host districts for the GERP project.***

Therefore, in light of the above observations, the Committee agrees with the prayers of the petitioners in 2 and 4 that the construction of substations in Arua and Nebbi Districts are expedited and the existing electricity network in West Nile to distribute from national grid transmission line of 132kV by March 2023 be upgraded.

5.0 OTHER INCIDENTAL ISSUES

5.1 Tariffs

In a public hearing, the Committee was informed that the cost of electricity in West Nile is higher than in the area serviced by UMEME.

The Committee noted that WENRECO introduced lifeline units for domestic consumers in quarter one 2021, charged at UGX 250 for the first 8kWh. UMEME's lifeline units are 15kWh also charged at UGX 250. Additionally, UMEME introduced a cooking tariff band for domestic consumers for consumption between 81-150kWh which are not available to the off grid scheme in West Nile.

The Committee observes that the Electricity Regulatory Authority provides regulatory oversight on tariffs for electricity in the country, a role that it has performed to ensure that off grid schemes manage their costs and the resultant tariffs. Failure to harmonise the available incentives for the various distributers increases costs for

customers and consequently increases reliance on biomass where the incentives for clean cooking are not implemented.

Recommendations:

The Committee recommends that:

i. ***ERA should ensure that tariffs are competitive and fair for the consumers.***
ii. ***A cooking tariff be introduced for the off grid schemes as is the case for UMEME to reduce reliance on biomass for cooking.***
iii. ***The lifeline units for WENRECO should be increased from 8kWh to 15kWh to align them to UMEME rates so as to encourage consumption.***

5.2 Health, Safety and Environment concerns at the Electro-Maxx generation facility

While visiting the generation facility at Euata in Arua the Committee observed the following HSE violations:

i. The Committee observed that the tiles in the switching station in Arua as operated by Electro-Maxx were broken which poses a safety threat to the workers.
ii. The switching station also lacked sufficient sanitary facilities, having one toilet facility for both genders.
iii. There was massive leakage of oil with no interceptors on site or the requisite floors to control oil spillage into the soil.
iv. The abandoned generators previously owned by WENRECO were still on site and had not been decommissioned.

Recommendations:

The Committee recommends that;

i. **An appropriate industrial floor that is safe to use in generation facilities, is resistant to abrasion and can manage the loads and traffic on site be installed in the switching station.**
ii. **WENRECO should decommission its abandoned generators as per the decommissioning plan that was submitted to the National Environment Management Authority.**
iii. **The floors at the generators should be fixed and proofed to prevent oil spillages.**
iv. **Additionally, an interceptor to manage oil spillages and run offs on site should be constructed.**
v. **Appropriate number of sanitary facilities should be availed expeditiously to address the needs of both female and male workers/ visitors on site.**
vi. **Monitoring and maintenance of the plant facilities should routinely be carried out to ensure that they are in good working condition.**

5.3 Fragmented planning in the sector

The Committee observed that Uganda's electricity supply industry is characterized by disjointed planning whereby each of the major players namely: the MEMD and the Agencies therein are working in silos. This has a bearing on implementation of the various projects. For instance Achwa I was completed in the first quarter of 2021 and Achwa II in October 2019 while the transmission line to evacuate power from the two dams is yet to be completed. A similar situation is likely to happen in Nyagak III where the generation facility is expected to be commissioned in March 2023, but so far only compensation for the way leave is ongoing for the evacuation line. This fragmented planning has given rise to cases of government paying for deemed energy. The Committee notes that the total budget required for deemed energy for FY 2022/23 was UGX. 193 billion of which UGX. 80 billion was provided leaving a funding shortfall of UGX. 113 billion.

Recommendations:

The Committee recommends that;

i. ***The MEMD should establish or strength the planning functions for electricity generation, transmission and distribution.***
ii. ***The MEMD should not enter new agreements for generation, transmission and distribution until the energy policy and energy are tabled and approved by Parliament.***
iii. **In future, Parliament should ensure that approval for funding for development of generation projects should be done simultaneously with their transmission components.**
iv. **GoU should stop negotiating PPAs with deemed energy clauses.**

5.4 Transmission loses

The West Nile region is served by long 33kV lines which result into high technical losses and poor voltage profiles. The use of low voltages in transmission contributes to technical losses because a reduction in voltage increases the current and resistance. This effect is bigger for even longer lengths of transmission lines. For the year 2020, transmission losses for the West Nile grid were approximated at 19%[18].

Recommendation:

The Committee recommends that;

i. ***To fully realize the envisaged benefits of the Kole-Gulu-Nebbi-Arua transmission project, the Ministry of Finance, Planning and Economic Development, UETCL, MEMD with their consultants should consolidate all efforts to ensure that this project is completed and commissioned by March 2023 as a way of reducing technical losses at transmission.***

[18] Energy Losses computed as the difference between the Energy Purchased and the Energy Sold. Electricity Supply Industry Performance Report,2020.

5.5 Impacts of load shedding

In the debate that ensued in the House and the public hearings held in West Nile, some of the following were observed as the effects of load shedding within the region:

i. Load shedding was reported to have affected delivery of education services in West Nile. With the onset of COVID-19 that promoted online learning, students were unable to study due to load shedding. They are now unable to do self-study after hours, which has affected performance.

ii. Deaths in hospitals due to power interruptions during surgeries as well as lives lost during the surge in COVID-19 cases as power interruptions disabled supply of oxygen.

iii. Despite the fact that West Nile is a hub for cross border trade, the absence of stable electricity has limited a number of business opportunities and increased the cost of business as businesses have to rely on generators.

iv. Loss of property due to unstable power. Cases of burnt property, destroyed equipment were reported.

v. Reduced opportunity to facilitate agro-processing. The Committee was informed that a number of factories in the region have closed due to unreliable power supply.

vi. Unemployment: The Committee was informed that the level of unemployment especially among the youth is high due to the fact that there are limited business opportunities. As a result, majority of the youth have resorted to drug abuse which culminates into insecurity in the region.

The Committee observed that availability of electricity in West Nile region is pertinent in achieving Uganda's vision of transforming the country from a peasant to an industrialized economy in addition to facilitating the Parish Development Model that is under implementation.

The Committee observed that the rampant power outages in West-Nile Region are enormously affecting the socio-economic transformation through retarding economic activities such as processing, welding, education and health systems in addition to accelerating insecurity in the Central Business District in Arua.

Recommendations:

The Committee recommends that;

i. ***The plant availability of the operated plants be increased, power dispatches increased and the connection of West Nile Region to the National Grid be expedited to avail stable and reliable power supply to West Nile.***

6.0 CONCLUSION

Rt. Hon. Speaker and Hon. Members; the need for adequate and reliable electricity is key in driving Uganda's vision of transforming the whole country from a peasant to an industrialized economy. Despite the West Nile being a trade hub connecting to South Sudan and DRC, it experiences rampant load shedding and power outages which have hindered its contribution to economic transformation of the country.

The reasons for this unreliable electricity are attributed majorly to the region not being connected to the National Grid thus failing to tap into the excess electricity available from the rest of the country and the other benefits accrued from being connected to a high voltage transmission network and substations. A good transmission network ensures that sources from different loads are synchronized, reduces transmission loads and there is easier control for remote and on site functions. Further, the two generators in the region are dispatching far below their subcontracted and installed capacities and thus failing to meet the demand of the region.

To address the rampant load-shedding in the region, the GoU has put in place several initiatives to overcome this challenge. In the short term, GoU is constructing a medium voltage line connecting Olwiyo to a substation in Pakwach, which is expected to be commissioned in November 2022. However, the long term solution is the completion of the Kole-Gulu- Nebbi- Arua transmission project which will connect West Nile to high voltage electricity backbone transmission infrastructure by March 2023. Thereafter GoU will have to invest in the distribution network so as to increase West Nile's rate of electricity access.

Therefore, the Committee in its findings agrees with the prayers of the movers of the motion except in Prayer 1 where it recommends that the contract of Electro-Maxx be terminated rather than GoU providing funds to Uganda National Oil Company to supply fuel to Electro-Maxx to generate its licensed capacity.

I beg to Report.

SIGNATURE SHEET FOR THE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES ON THE REPORT OF ERRATIC POWER SUPPLY IN WEST NILE

No.	NAME	PARTY	SIGNATURE
1.	**Hon. Dr. Otiam Emmanuel Otaala (Chair)**	**NRM**	
2.	**Hon. Dr. Kugonza Emely (Deputy)**	**NRM**	
3.	Hon. Biyika Lawrence Songa	NRM	
4.	Hon. Kateshumbwa Dicksons	NRM	
5.	Hon. Wambede Seth	NRM	
6.	Hon. Agasha Juliet Bashisha	NRM	
7.	Hon. Tumwesigye Josephat	NRM	
8.	Hon. Sendawula Christine Bukenya	NRM	
9.	Hon. Akamba Paul	NRM	
10.	Hon. Mugumya Clare	NRM	
11.	Hon. Natumanya Flora	NRM	
12.	Hon. Alion York Odria	NRM	
13.	Hon. Ruhunda Alex	NRM	
14.	Hon. John Faith Magolo	NRM	
15.	Hon. Angura Fredrick	NRM	
16.	Hon. Orone Derick	NRM	
17.	Hon. Apollo Yeri Ofwono	NRM	
18.	Hon. Twinomujuni Francis Kazini	NRM	
19.	Hon. Otukol Sam	NRM	
20.	Hon. Katalihwa Donald Byabazaire	NRM	
21.	Hon. Ogwari Polycarp	NRM	
22.	Hon. Kwizera Eddie Wa-Gahungu	NRM	
23.	Hon. Ariko Edmund Herbert	NRM	
24.	Hon. Kaaya Christine Nakimwero	NUP	

25.	Hon. Kanyike Ronald Evans	NUP	
26.	Hon. Nalule Asha Aisha Kabanda	NUP	
27.	Hon. Tebandeke Charles	NUP	
28.	Hon. Aol Betty Acan	FDC	
29.	Hon. Nyakato Asinansi	FDC	
30.	Hon. Kayondo Fred	DP	
31.	Hon. Akena James Jimmy	UPC	
32.	Hon. Adidwa Abdu	INDEP.	
33.	Hon. Kamuntu Moses	INDEP.	
34.	Hon. Auma Linda Agnes	INDEP.	
35.	Hon. Musana Eric	INDEP.	