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OFFICE OF THE AUDITOR-GENERAL
Enhancing Accountability

SPECIAL AUDIT REPORT OF THE AUDITOR-GENERAL ON

LAKE TURKANA WIND POWER PROJECT

PAYMENTS OF GOVERNMENT OF KENYA (GOK) TRANSMISSION INTERCONNECTOR DELAY DEEMED GENERATED ENERGY (GOK TI DELAY DGE)

APRIL 2021

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Abbreviations	
AIE	Authority to Incur Expenditure (AIEs).
CPs	Conditions Precedent
DGE	Deemed Generated Energy
DRPCS	Dynamic Reactive Power Compensation System
EPC	Engineering, Procurement and Construction
GOK	Government of Kenya
IDA	International Development Association
KETRACO	Kenya Electricity Transmission Company
KPLC	Kenya Power and Lighting Company Ltd
KV	Kilovolts
KRA	Kenya Revenue Authority (KRA)
LTWP	Lake Turkana Wind Power Ltd
MOU	Memorandum of Understanding
MOE	Ministry of Energy
MOEP	Ministry of Energy and Petroleum
MW	Mega-Watts
N.E.O	Net Electrical Output
PS	Permanent Secretary
PPP	Public Private Partnership
PPA	Power Purchase Agreement
PFM	Public financial Management
PPDA	Public procurement and disposal Act
SAGA	Semi-Autonomous Government Agencies
SCADA	Supervisory Control and Data Acquisition System
TI	Transmission Interconnector
TORs	Terms of Reference
TRANSCO	Lake Turkana Wind Power Transmission Company Limited
WTGs	Wind Turbine Generators
VAT	Value Added Tax

1 EXECUTIVE SUMMARY

1.1 Introduction

1.1.1 The Principal Secretary in charge of the Ministry of Energy vide letter reference ME/CONF/3/2/73A requested the Auditor-General to conduct a Special Audit on the Lake Turkana Wind Power (LTWP) in regard to payments of Government of Kenya (GOK) Transmission Interconnector Delay Deemed Generated Energy (GOK TI DELAY DGE).

1.2 Terms of Reference

1.2.1 The special audit was sanctioned and guided by the following Terms of References (TORs):

- Historical Background of the Project;
- Budgeting for Deemed Generated Energy (DGE)- GOK TI DELAY DGE and construction of the transmission line;
- Project implementation and Power Purchase Agreements (PPAs);
- Deemed Generated Energy (GOK TI DELAY DGE) Expenditure; and
- Construction of Transmission Line.

1.3 Scope of Work and Limitations

1.3.1 The special audit reviewed transactions covering financial years 2010/2011 to 2018/2019, in regard to the Terms of References to understand conceptualization of the Project and report on the same. It covered transactions at the following entities:

- Ministry of Energy (MOE);
- Kenya Electricity Transmission Company Ltd (KETRACO);
- KPLC; and
- Lake Turkana Wind Plant in Loiyangalani and Suswa Sub-Stations.

1.4 Report Structure

1.4.1 This special audit report has four sections; executive summary, introduction, detailed findings and appendices. The report should be read in its entirety in order to comprehend fully the approach and the findings. The special audit has reported on facts as understood, with the aim of informing the Public Investment Committee

(KPLC and KETRACO), and the Boards of Directors of KPLC and Kenya Electricity Transmission Company Ltd for decision making.

1.5 Key Findings

1.5.1 The Lake Turkana Wind Power Project is located in Loiyangalani, Marsabit County, Kenya covering approximately 160 square kilometers (40,000 acres). The land was leased by Lake Turkana Wind Power (LTWP) Ltd from the Government of Kenya for a period of 99 years with effect from 2005.

1.5.2 LTWP Ltd then contracted, DEWI, an international wind energy-consulting firm, in 2005 to carry out wind tests in the wind farm after which LTWP Ltd submitted the test results and proposal to the Government of Kenya in April 2006.

1.5.3 In its submission, LTWP Ltd proposed to the Government of Kenya to construct a wind power plant, and to sell the energy generated to KPLC. According to a needs analysis report, the project was to increase Kenya's national power generation by 17 percent.

1.5.4 On 4 November, 2009, the KPLC Board of Directors, approved the decision to engage LTWP Ltd through a Power Purchase Agreement that would result in LTWP Ltd selling 300MW of power to KPLC. Within 4 days, KPLC wrote to the Energy and Petroleum Regulatory Authority (EPRA) (formerly ERC), through letter Ref No. KPLC1/2/3/3 dated 9 November, 2009, for an approval to enter into a Power Purchase Agreement. The approval was granted within 2 days by EPRA (formerly ERC) on 11 December, 2009.

1.5.5 LTWP Ltd, as a private entity, consequently entered into a contract with KPLC through a Power Purchase Agreement on 29 January, 2010. According to Section 3 (e) and Clause 2 Section (b) of the Power Purchase Agreement, LTWP Ltd was to Finance, Design, Procure, Construct, Install, Test, Commission, Operate and Maintain the plant in accordance with Prudent Operating Practice, and sell the net electrical output exclusively to KPLC.

1.5.6 On the other hand, KPLC was to take delivery of all net electrical output and pay energy charges for such net electrical output. The signed Power Purchase Agreement also required KPLC to purchase power generated by LTWP Ltd for a period of 20 years from the date of the first commissioning of the wind power plant.

1.5.7 The Energy and Petroleum Regulatory Authority EPRA granted an Electric Power Generation License to LTWP Ltd on 16 December, 2010, License Ref No. G1.01.11. granted according to the provisions of Section 6(a), 27 and 31 of the Energy Act, 2006.The license was specified and limited to the 300MW wind electric power generation plant which was to be procured, constructed, installed, owned, maintained and operated by the licensee. The license was to continue in operation from the date of commencement for a duration of twenty (20) years.

1.5.8 The special audit therefore, notes with concern that a Power Purchase Agreement was executed between LTWP Ltd and KPLC on 29 January, 2010, before LTWP Ltd had obtained a license to generate electric power, which was granted almost a year later on 16 December, 2010 after the Power Purchase Agreement was executed.

1.5.9 The Power Purchase Agreement was guided by the Feed-in-Tariff policy. The Feed-in-Tariff policy allowed power producers to sell renewable energy generated electricity to KPLC at a pre-determined tariff for a given period. Thus, LTWP Ltd was to produce 300MW, and sell to KPLC at a rate of Kshs. 7.65 (EUR 0.0722) per Kilowatt (Kwh). This price was lower than the EPRA recommended Feed-in-Tariff amount of Kshs. 11.

1.5.10 The special audit noted that the then Managing Director of KPLC, and Member of the Board of Directors at the time of executing the Power Purchase Agreement with LTWP Ltd was Dr. Eng. Joseph Njoroge, the current Principal Secretary (Ministry of Energy).

1.5.11 The project location in Loiyangalani, at the time of executing the Power Purchase Agreement was not serviced by any transmission line network. In order to supply the power to the national grid for uptake by KPLC as was envisaged in the Power Purchase Agreement, there was need for developing a transmission line from Loiyangalani to Suswa where the wind farm was to interconnect to the National Grid.

1.5.12 In this regard, and in order to actualize to requirements of the Power Purchase Agreement, the Ministry of Energy acting for the Government of Kenya was to construct a 400 Kilovolts (KV) rated Sub-Station near Loyangalani and a 428Km transmission line from Loiyangalani to Suswa to realize the Project.

1.5.13 The Ministry of Energy thus granted LTWP Ltd, a private entity, the exclusive rights to survey the project area and wind resources and further invite tenders on behalf of Kenya Power and Lighting Company.

1.5.14 The Ministry of Energy therefore contravened Section 2 (b) of the repealed Public Procurement and Disposal Act, 2005 (PPDA), in promoting competition and ensures that competitors were treated fairly as they did not conduct any competitive bidding in the identification of LTWP Ltd, as the private investor.

1.5.15 Section 74, of the repealed Public Procurement and Disposal Act, 2005 also provides circumstances under which direct procurements may be used, which is urgency and lack of reasonable alternatives. None of these were justified to warrant the hand-picking process of LTWP Ltd by the Ministry of Energy.

1.5.16 The special audit confirmed that the process was contrary to Section 3 (2) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009 as there was no competitive bidding for this potential Public Private Partnerships arrangement, and neither was there any justification for such an exception.

1.5.17 Section 3 (2) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009, provides that except as provided for under the Regulations, all Public Private Partnership projects shall be procured through a competitive bidding process as provided for under the Regulations or any other written relevant law.

1.5.18 The special audit noted that the then Permanent Secretary, and a member of the Board of Directors at the time of signing the Power Purchase Agreement and sourcing and engaging LTWP Ltd was Mr. Patrick M. Nyoike.

1.5.19 LTWP Ltd were therefore, involved with in the Financing, Designing, Procurering, Constructing, Installing, Testing, Commissioning, Operation and Maintenance of the plant, and they completed the power generation plant on 27 January, 2017. In addition, they were involved in part of the procurement process (invitation to tender), supposedly on behalf of KPLC for Lot 3; 400Kv transmission line from Loiyangalani to Suswa, which was a red flag and potential conflict of interest.

1.5.20 The special audit identified the following key stakeholders involved in the Project:

	Entity	Role
1	Ministry of Energy	Provided GoK letter of support to LTWP Ltd
2	Kenya Power and Lighting Company	Purchase and distribute electricity from LTWP Ltd
3	Energy and Petroleum Regulation Authority (EPRA) formerly Energy Regulation Commission (ERC)	Regulates electricity tariff setting and approves the changes in energy tariff
4	Lake Turkana Wind Power (LTWP) Ltd (Private Entity)	Generate wind power and exclusively sell to KPLC
5	KEMA (Later acquired by DNV GL) and KPMG, a private consulting firm	Carried out the Technical and Financial evaluation for a Lot.
6	DEWI GmbH (Deutsches Windenergie Institut), (Later acquired by UL (Underwriters Laboratories)	Carried out wind tests' in the wind farm for LTWP
7	Kenya Electricity Transmission Company Ltd (KETRACO)	Constructed Transmission Inter-connector (TI) line from Loiyangalani to Suswa Sub-Station.
8	The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd	Contracted to construct Transmission Inter-connector (TI) line from Loiyangalani to Suswa Sub-Station.

1.5.21 KETRACO, was formed on 2 December, 2008, and mandated the responsibility for bulk electricity transmission in the country including to "plan, design, construct, own, operate and maintain high voltage electricity transmission grids", and thus, did not exist at the time of conceptualizing the Project and the formative stages of sourcing for the LTWP Ltd.

1.5.22 This was highlighted in the Minutes of the 19th Special Meeting of the Energy Regulatory Commission (ERC) dated 2 September, 2011, under Minute Min/ERC/sp.58/19/2011 Paper No.168/2011, where the Ministry of Energy instructed KPLC to enter into negotiation for Power Purchase Agreement (PPA) with LTWP Ltd in respect of the sale and purchase of energy to be generated from the wind power plant.

1.5.23 KETRACO took over the process of completing the transmission line and thus contracted M/s. Isolux Ingenieria SA, for construction of the 400Kv transmission line with KEMA as the consultant in 2013. However, the line evacuating the power generated was not fully completed by KETRACO until 24 September 2018, therefore a 21-month delay in transmission of generated power. The plant was completed in 27 January 2017.

1.5.24 The special audit noted that there were challenges in completing the transmission line which affected the commissioning of the project transmission line. The challenges related to technical and financial weaknesses of the contractor, M/s. Isolux Ingeniers SA.

1.5.25 The initial agreed completion date was 31 December, 2013. The date was extended the first time to 30 June, 2014, and further extended a second time for 2.5 years to 30 December, 2016. Despite this, the transmission line was not completed resulting in a further third extension. The transmission line was eventually completed on 24 September, 2018 using a different contractor. This raised a red flag on the capacity and competency of the contractor initially engaged and whether due diligence was conducted prior to their selection.

1.5.26 These delays were attributable to M/s. Isolux Ingenieria SA, that was declared bankrupt during the execution of their contract, thus resulting in KETRACO terminating their contract. The completion delays resulted to Government of Kenya Transmission Interconnector (TI) delay Deemed Generated Energy (DGE) claims by

LTWP Ltd as discussed below. As noted earlier, LTWP Ltd completed the power generation plant on 27 January, 2017 but the transmission line was completed on 24 September, 2018.

Transmission Interconnector (TI) Delay Deemed Generated Energy (DGE) payments

1.5.27 The Power Purchase Agreement between KPLC and LTWP Ltd signed on 29 January, 2010, defined Deemed Generated Energy (DGE) as, *"The electrical energy expressed in Kilowatt (kWh) as a result of KPLC system interruption or as a result of dispatch instruction issued by KPLC pursuant to Clause 7.3 of the Power Purchase Agreement resulting in power not being generated or delivered to KPLC at either of the delivery points"*.

1.5.28 The Power Purchase Agreement under Clause 9.5.1, Schedule 6, Part B Paragraph 2 of the third amendment provided that, *"with effect from the 50 MW, net electrical output delivery commencement date, KPLC shall pay to LTWP Ltd, in respect of KPLC DGE, the KPLC DGE payments and in respect of TI interruption DGE, the TI interruption DGE payments, subject to conditions set"*.

1.5.29 TI Delay DGE is the equal of the energy charge that would be payable by KPLC in respect to Deemed Generated Energy had it been delivered or evacuated by the transmission interconnector line in accordance to Clause 9.3 of the Power Purchase Agreement (PPA). This meant payment of monthly penalties to LTWP Ltd for every month's delay in the event the transmission line was not complete, and the generation plant was complete.

1.5.30 As noted by LTWP Ltd, due to delays in completing the transmission line, generated power was not evacuated from the LTWP Ltd plant resulting in accrued penalties to GOK referred to as Deemed Generated Energy (DGE) claims amounting to Kshs.18,499,082,672 (EUR167,261,145) for the period 27 January, 2017 to 10 September, 2018 as detailed below:

	Particulars	Amount due (EUR)	Remarks
1	DGE for the period 27 January, 2017 (Initial commencement date) to 15 May, 2017 (1st extended commencement date)	17,722,013	-
2	DGE for the period 15 May, 2017 to 31 May, 2018 (2nd extended commencement date	127,577,128	-
	Total accrued DGE for the period 27 January 2017-31 May 2018	145,299,141	-
	Less write-offs by LTWP Ltd agreed by MoE and KPLC	(17,722,013)	-
	Net amount due for the period 27 January 2017 to 31 May 2018 (A)	127,577,128	Ministry of Energy paid EUR46,000,000 while the outstanding amount of EUR 81,577,128 was agreed to be recovered by LTWP Ltd through a tariff increase of EUR 0.00845 /Kwh for the period 01 June 2018-31 May 2024 (DGE recovery period). The recoveries have not yet been effected. They are awaiting approval by Energy Petroleum Regulatory Authority.
3	Due for the period 01 June 2018 to 24 September 2018 (Completion date)	45,197,003	-
	Less write-offs by LTWP Ltd agreed by MoE and KPLC	(5,512,986)	-
	Net amount due - 01 June 2018-24 September 2018 (B)	39,684,017	Amount of EUR39,684,017 paid to LTWP Ltd by KPLC through budget support from Ministry of Energy
	Total DGE dues before payments	167,261,145	Total payments of EUR85,684,017 while the balance of EUR81,577,128 to be recovered by LTWP through a tariff increase of EUR 0.00845 /Kwh for the period 01 June 2018-31 May 2024 (DGE recovery period). Included in this figure was the last payment made on 31 July 2019 of EUR9,978,603 (Kshs.1,160,000,000)

1.5.31 Out of the total accumulated/outstanding DGE dues of EUR167,261,145 (Kshs.18,499,082,672), the Government has made budgetary provisions of EUR85,684,017 (Kshs.10,298,690,000). This amount were budgeted under the Ministry of Energy and paid to LTWP Ltd through KPLC. The balance of Kshs.9,805,067,290 (EUR81,577,128) is to be recovered by LTWP Ltd through a tariff increase by KPLC of EUR 0.00845/Kwh for the period 01 June, 2018 to 31 May, 2024 (DGE recovery period) and therefore, likely to be borne by the consumers.

Power Purchase Agreements (PPAs)

1.5.32 The special audit noted that the PPAs were negotiated by the parties and approved by the Energy Regulatory Commission (ERC) on 11 December, 2009 and executed on 29 January, 2010 between KPLC and LTWP Ltd. The PPA had the following provisions:

- LTWP Ltd was to sell to KPLC, 300MW of energy at a cost of Kshs.7.65 (Euro 0.0722) per Kilowatt (Kwh);
- The power produced by LTWP Ltd was to be bought at a fixed price by KPLC over a 20-year period;
- The energy of up to 55% load factor mounting to 1,445,400 KWH was on guaranteed take or pay basis;
- KPLC was to compensate LTWP Ltd for lost production (Deemed Generated Energy);
- The Government was to provide a Sovereign Guarantee to cover Political Risks and payment defaults by KPLC; and
- The transmission line would be developed by either an affiliate of LTWP Ltd or by the Government.

1.5.33 The special audit noted that the following concerns that question the spirit of the Clauses in the PPA:

- It did not have quid pro quo consideration as the penalty did not apply to LTWP Ltd in the case where the transmission line was complete and generations plant was not ready;

- M/s. Isolux Ingenieria SA, and the consultant KEMA, both who had been procured by LTWP Ltd were the key players in determining the success of the transmission line, yet LTWP Ltd was the eventual beneficiary of the delays in completion of the project by way of TI interruption DGE payments; and
- Payments for the TI interruption DGE commenced without any independent review to confirm readiness of power generation by LTWP Ltd.

1.5.34 The Energy and Petroleum Regulatory Authority (formerly ERC), issued an Electric Power Generation license to LTWP Ltd on 16 December, 2010 pursuant to the provisions of Section 6(a), 27 and 31 of the Energy Act, 2006.

1.5.35 The Power Purchase Agreements and other correspondences between KPLC and Ministry of Energy were reviewed and the following noted:

a. There was a total of three amendments to the PPA dated (i) 29 September, 2011, (ii) 14 September, 2012 and (ii) 13 May, 2013.

b. The 1st amendment to the PPA between LTWP Ltd and KPLC dated 29 September, 2011 was to incorporate a change in the security support that was being provided to LTWP Ltd by the Government of Kenya and amend the fact that the Transmission Interconnector was now to be developed and owned by KETRACO and not LTWP Ltd.

c. Under clauses 10.9 and 14.6(c) of the PPA, the Government of Kenya was to provide a Sovereign Guarantee to LTWP Ltd for a commercial default in the event that KPLC was unable to fulfil its payment obligations under the agreement. However, in May 2010 the government resolved that the Sovereign Guarantee could not be provided, and instead attempted to structure an alternative security package with the World Bank and the Multilateral Investment Guarantee Agency (MIGA) to cover payments in the event of a termination of PPA (political risk mitigation). This alternate also comprised a letter of credit guaranteed by the International Development Association (IDA) to cover payment default (KPLC credit risk mitigation).

d. According to KPLC Board Minutes dated 7 May, 2013, under Min BM/21/13, and the Cabinet Memorandum on the status of implementation of the project, the World Bank withdrew its intent to provide Partial Risk Guarantee (PRG) support of the project as designed citing the following reasons:

- The large size of the plant could impact on the reliability of systems supply, instead advising that Kenya should develop wind power gradually in smaller lots (50-100MW) and to procure on competitive basis to ensure cost effectiveness and to integrate variable wind into the grid;
- The take-or-pay obligation in the PPA exposed KPLC to unacceptable high financial risk of payment of curtailed energy which KPLC would not be able to dispatch due to system constraints;
- The timeline of 26-months for construction of the transmission line from Loiyangalani was very short. This period was inadequate and KPLC would eventually be paying for power that would not be utilized; and
- KPLC lacked experience in managing dispatch from a large wind power installation into its power system and the project would cause system instability.

All these red flags were inadvertently not considered by the project stakeholders.

1.5.36 After the withdrawal of the World Bank from the Project, the Government of Kenya (GoK) entered into an agreement with the LTWP Ltd lenders of the Project pursuant to the GoK letter of support which was to provide Partial Risk Guarantee for the Project. According to Minutes of the Cabinet Committee Meeting, held on Thursday 24 January, 2013, the Cabinet, under Min 7/13, approved the GoK letter of support, and it was also highlighted that the Partial Risk Guarantee (PRG) was to be provided by the Africa Development Bank.

1.5.37 The direct agreement between GoK and LTWP Ltd lenders was cleared by KPLC Legal Advisors (Hamilton Harrison and Mathews) through letter REF 42/K0017/1452 dated 22 August, 2014 and the then Attorney-General of Kenya, Prof. Githu Muigai, noting that the proceedings taken by GoK in signing the GoK letter of support had the legal basis of law. This was after the Government of Kenya had signed the loan agreements with the lender; Instituto Credito Official of the Kingdom of Spain and Deutsche Bank.

1.5.38 According to Clause 10.9.5(a) of the PPA, the special audit noted that a security support facility of Kshs.4,711,560,000 (EUR42,600,000), was to be collected and remitted by KPLC into an Escrow Account which was to be established as a security for KPLC payment obligation to LTWP Ltd under the PPA.

1.5.39 The special audit established that KPLC had not opened this Escrow Account as at the time of completion of the special audit, and was not collecting the security support surcharge or remitting the same to LTWP Ltd. KPLC was therefore in breach of this obligation as evidenced by the various monthly invoice notices sent by LTWP Ltd to KPLC amounting to EURO 32,589,315. This could breach clause 15 of the PPA.

1.5.40 Clause 15 of the PPA provides that LTWP Ltd is entitled to send a default notice to KPLC and eventually entitle LTWP Ltd under Clause 15.6 of the PPA to terminate the PPA. Under clause 15.6.2, *KPLC would thereafter be under obligation to pay the 'Transfer Amount', which is defined under the PPA as a sum of the Project Cost (being the total value of LTWP's investment) and a payment to the shareholders of an equivalent of the Net Present Value of the budgeted profits for 5 years discounted at 10% (clause 15.6.2 (ii)).*

EXPENDITURE INCURRED

1.5.41 The special audit established that following the 3 amendments to the Power Purchase Agreement, there were two additional variations, on 31 July, 2014 and 19 September, 2017. The first variation dated 31 July, 2014, was to incorporate the long stop effective date changes from 30 July, 2014 to 30 November, 2014 or such dates as may be agreed by the parties from time to time.

1.5.42 In a letter dated 7 September, 2017, Ref. ERC/ER/2/5/JM/cm, Energy and Petroleum Regulatory Authority (EPRA) gave approval for the second variation, and the PPA variation was dated 19 September, 2017. The variation was to incorporate Deemed

Generated Energy (DGE) Payments. The second variation agreement captured the resolution that was agreed upon in the consultative meeting held on 5 July, 2017 that recognized the DGE payments for the period 15 May, 2017 to 31 May, 2018 and gave an estimate of EURO 127,577,128.32 out of the Euro 46 Million which had already been settled by GoK to LTWP Ltd, and the balance was to be paid through the tariff increase in the energy charge rate of Euro 0.00845/Kwh applicable over a period of six (6) years from 1 June 2018 to 31 May 2024.

1.5.43 The special audit noted that a total of Kshs.18,499,082,672 (EUR167,261,145) had accrued as Deemed Generated Energy (DGE) dues as follows:

	Payment period	No of days	Amount (Euro)	Exchange Rate	Amount (Kshs)
1	15 May 2017- 31 May 2018	381	127,577,128	110.60	14,110,030,392
2	1 June 2018-10 September 2018	101	39,684,017	110.60	4,389,052,280
			167,261,145		18,499,082,672

DGE Payment of Kshs.14,110,030,392 (Euro. 127,577,128)

1.5.44 The delays in constructing the Transmission-Interconnector (TI) line as had been agreed in Schedule 13 of the Power Purchase Agreement resulted in the absence of a mechanism to evacuate electric power. The TI was to be finalized by the commissioning date of 27 January, 2017, however it was completed on 24 September, 2018.

1.5.45 According to Clause 9.5 of the Power Purchase Agreement (PPA), amended, on 13 May, 2013, after the First Commercial Operation date of 27 January, 2017, KPLC was to pay LTWP Ltd in respect of each KWH of DGE within a month, the amount (The Deemed Generated Energy payment) equal to the energy charges that would have been payable in respect of such DGE had it been delivered at either of the delivery points.

1.5.46 Clause 11.1 of the PPA required LTWP Ltd to install a metering system in the project to be used to measure total production units. However, in the absence of a functional metering system, the special audit was not able to determine accurately the production and purported energy charges.

1.5.47 Schedules 1 and 6 of the PPA, also required that a system known as "SCADA" to be installed to confirm quantity of power generated by the turbines at any one particular time. The power plant and the SCADA system for the power plant as at the commercial operation date of 27 January, 2017 was not recording wind speed and air density measurement required for DGE computation purposes. This was attributed to absence of the Transmission Interconnector (TI).

1.5.48 The special audit only established that LTWP Ltd recruited and appointed independent Engineer, Mott MacDonald Limited on 2 June, 2016, in accordance to clause 6.11 of the PPA, which required both LTWP Ltd and KPLC to appoint an independent engineer who would give an independent opinion on whether the project was available (project was in production).

1.5.49 The estimated Deemed Generated Energy (DGE) total amount owed to LTWP Ltd between 15 May, 2017 and 31 May, 2018 (381 days) was EUR127,577,128, which was computed based on a formula that had been indicated in the Power Purchase Agreement. This was a balance after a write-off of EUR17,722,013 by LTWP Ltd.

1.5.50 Out of the above DGE amount of Kshs.14,110,030,392 (EUR127,577,128), GOK paid LTWP an amount of (EUR46 Million) resulting in outstanding balance of EUR81,577,128, that was deferred and LTWP Ltd was to receive a tariff increase of EUR 0.00845 per Kwh ("DGE Recovery Period Tariff"), during the period from 1 June 2018 to 31 May 2024 ("DGE Recovery Period"). Any TI Delay beyond 01 June 2018 would result in LTWP being paid GOK TI Delay DGE.

DGE payments of Kshs.4,389,052,280 (EUR39,684,017)

1.5.51 In the second extension, LTWP Ltd invoiced GOK a total of EUR45,197,003 as DGE dues payable for the period 01 June to 24 September, 2018. LTWP Ltd wrote-off EUR5,512,986, resulting in a net amount of EUR39,684,017 payable by GoK. The total amount was paid by KPLC using funds disbursed through the Ministry of Energy.

VAT Claims by LTWP Ltd of Kshs.2,785,429,737

1.5.52 Section 8 (1-3) of the VAT Act, 2010, Schedule 5, on zero rated goods, part B (special goods No.17- Equipment for Electric Power Generation) states that, "*Capital equipment, excluding motor vehicles, spare parts and office equipment, for privately financed power generation projects with capacity to sell electricity into the national grid, are zero rated subject to a written approval by the Permanent Secretary to the National Treasury,*".

1.5.53 The Cabinet Secretary, National Treasury wrote to the Chairman of LTWP Ltd vide a letter Ref: No. ME/CONF/2/1/1 dated 24 October, 2014 stating that the National Treasury had confirmed that the taxes due on those aspects of the Project that were not covered by law would be paid by the Government as a contribution towards the Project and that this contribution would be factored in the determination of the tariff in order to make energy affordable to the consumers and to ensure the tariff was not adjusted upwards. The letter states that all invoices issued by KRA of such taxes should be submitted to the Ministry of Energy and Petroleum for settlement.

1.5.54 The special audit established a total of Kshs.2,785,429,737 was payable VAT by LTWP Ltd for the period the Project was under construction. Out of these amounts, Kshs.1,053,084,283 was already paid to LTWP Ltd as tax refund while Kshs.46,466,018 was paid to KRA by the Ministry of Energy on behalf of LTWP Ltd leaving an outstanding VAT claim of Kshs.1,685,879,435 as detailed below:

Voucher	Voucher date	Payee	Payment Date	Amount (Kshs)
2965	29/6/2017	LTWP Ltd	6/30/2017	116,553,360
2123	27/9/2016	LTWP Ltd	9/21/2016	102,882,053
2746	28/6/2017	LTWP Ltd	30/6/2017	833,648,870
	Amount Paid to LTWP Ltd as GOK Contribution			1,053,084,283

127		KRA VAT	9/21/2016	46,466,018
		VAT Claim by LTWP Ltd		1,685,879,435
		Total VAT		**2,785,429,737**

1.5.55 The special audit noted with concern that the VAT claims by LTWP Ltd may have not been justifiable considering that taxes due on those aspects of the Project that were not covered by law were paid for by the Government as a contribution towards the Project, premised that this contribution was to be factored in the determination of a lower tariff. On the contrary, subsequent agreements highlighted that LTWP Ltd was to receive additional tariff increase of EUR 0.00845 per kWh (DGE Recovery Tariff) during the period from 1 June 2018 to 31 May 2024 (DGE Recovery Period) paid for by GoK which would be an extra load for the consumer and tax payers.

Construction of Transmission Line.

1.5.56 Clause 2.4 of the Power Purchase Agreement recognized that Transco Ltd which is a subsidiary of LTWP Ltd was to develop the Transmission Interconnector (TI) line. According to clause 1.1 of the PPA, Transco Ltd is a company affiliated to LTWP defined as, "Transco" which means Lake Turkana Wind Power Transmission Company Limited. Transco Ltd was to Finance, Construct, Operate and Maintain the Transmission Interconnector as was approved through the Cabinet Memorandum of implementation under PPP letter Ref No.ME/CONF/3/2/73A dated 3 June, 2009. This is a Built Own Operate Transfer (BOOT) type of a Public Private Partnership (PPP) arrangement guided by section 3(d) of the Public Procurement and Disposal (PPP) Regulations 2009.

1.5.57 The special audit team noted that initially the transmission line was to be constructed by Transco which is a private developer, however through letter Ref No.conf.193/01 "TY", the PS, National Treasury had reservation on the impact of the transmission line being developed by the private developer and the effect it will have on the electricity tariff. The Government of Kenya reversed the decision and confirmed through a letter Ref No.ME/CONF/3/2/8 dated 30, January 2010 to undertake the construction of the transmission line with the support from the Kingdom of Spain through M/s. Isolux Ingeniers SA, an Engineering Procurement

Construction (EPC) contractor. This was because GOK wanted have ownership of the transmission line.

1.5.58 The cost of construction of the electricity transmission line was to be financed through a concessionary loan funding from the Government of Spain, Deutche Bank and Government of Kenya as follows:

	Contract signed	Contract Date	Amount Euros	Amount(Kshs)
1	Loan agreement between Instituto Credito official of the Kingdom of Spain and Ministry of Finance of the Republic of Kenya	30 March, 2012	55,000,000	6,083,000,000
2	Deutsche Bank	29 April, 2013	55,000,000	6,083,000,000
3	GOK contribution	-	32,038,152	3,543,419,611
	Total			15,709,419,611

Invitation to tenders

1.5.59 LTWP Ltd invited tenders on behalf of KPLC in accordance with the agreement of the Special Task Force that had been established between the two parties to facilitate this process. This was a conflict considering LTWP Ltd were contracted to Finance, Design, Procure, Construct, Install, Test, Commission, Operate and Maintain the plant.

1.5.60 Consequently, the Power Purchase Agreement (PPA) of 29 January, 2010, gave the exclusive mandate to deliver the plant and the transmission line to LTWP Ltd. As earlier reported, at that time, KETRACO which had already been incorporated on 2 December, 2008 was not solely involved in the procurement process of the contractor for the transmission line (M/s. Isolux Ingenieria SA).

1.5.61 The Project had been split into three (3) contract lots as indicated in the table below. Lots 1 and 2 were to be done by LTWP Ltd, while Lot 3 was to be done by a M/s. Isolux Ingenieria SA which turned out to be affiliated to LTWP Ltd.

S/no	Lot	Description	Contractor
1	Lot 1	Electrical infrastructure at the LTWP Wind Farm, consisting of the Wind Farm, 33Kv grid and the collection busbar at Loiyangalani.	LTWP Ltd
2	Lot 2	400/33Kv substation Loiyangalani, 400/220Kv Sub-station Suswa including installation of SCADA system.	LTWP Ltd
3	Lot 3	400Kv Transmission Line from Loiyangalani to Suswa, 220 kv tie in at Suswa.	M/s. Isolux Ingenieria SA and eventually completed by The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd

Construction of Transmission Line (Lot 3)

1.5.62 The special audit established that the tender package was compiled by KEMA Consultants and reviewed by the Task Force composed of; Ministry of Energy, KPLC, KETRACO and LTWP Ltd. The final approval to issue the tenders was given in the Task Force Meeting Number.9 of 3 July, 2009.

1.5.63 The following seven bidders were prequalified to participate in the tender: (i) M/s. Cobra/Chidhiya, (ii) M/s. Elecnor, (iii) M/s. Isolux Ingenieria SA, (iv) M/s. Iyoti, (v) M/s. Kalpatsara, (vi) M/s. KEC Transrail and (vii) M/s. Gammon.

1.5.64 The seven prequalified companies were invited to bid with closing dates of the tender set on 19 October, 2009. Five companies out of the seven, responded to the bid and were evaluated.

1.5.65 The opening of the above bids was done at KPMG Offices in the presence of LTWP Ltd, KPLC, KETRACO and KEMA who coordinated the tendering process and issued invitation to bid. It was noted that, LTWP Ltd were to determine the final ranking of the firms considering the financial offer/conditions and financing solution.

1.5.66 According to the KETRACO Board Minutes dated 29 July, 2011, the Board of KETRACO agreed and approved negotiations of the Transmission Interconnector through which energy from the LTWP Ltd would be transmitted, and mandated KETRACO to develop the line. KETRACO was therefore given the mandate to construct or subcontract the services of building the Transmission Interconnector line which was awarded to M/s. Isolux Ingeniers SA.

1.5.67 KETRACO signed a contract on 30 December, 2011 with M/s. Isolux Ingenieria SA at a cost of Kshs.16,934,872,132 (EUR142,039,152). This contract was signed for a period of 24 months from the date of the Final Notice To Proceed (FNTP). The Final Notice To Proceed (FNTP) with the contract was issued by KETRACO vide a letter referenced KET/CS/2/14G/5/DM/bnk, dated 13 August, 2014 addressed to M/s. Isolux Ingeniers SA.

1.5.68 The special audit noted that M/s. Isolux Ingeniers SA, contract was varied through various addendums as follows:

Particulars	Details
Addendum 01	Dated 2 August, 2013 to amend Clause 8.1(c) on Full Notice To Proceed with the EPC contract, after the contract was amended from 18 months to 24 months, period within which either party may by a written notice to other party terminate the contract, validity period was extended to 30 December, 2013
Addendum 02	Signed on 26 February, 2014 with the following changes: • Clause 8.1(c) and all associated reference in the EPC contract and Addendum 1 agreement were amended, in relation to Full Notice To Proceed issuance in reference to 18 months after the contract date amended to 30 months after contract terms and conditions of the EPC contract as amended in this Addendum 2 were valid until 30 June, 2014 • The parties agreed in relation to the Full Notice To Proceed as defined within the contract. The contractor would consider the Full Notice To Proceed as dully issued once the employer has agreed with its obligation, in particular, regard to the advance payment as agreed within the contract • Clause 14.1(c) shall not apply and the contract price shall remain fixed.

Particulars	Details
Addendum 03	Contract price varied on 22 July, 2016 from the initial Kshs.16,934,872,132 (EUR142,039,152) to Kshs.17,327,406,719 (EUR145,303,201). This was a difference of Kshs.389,357,093 (EUR3,265,049).
Addendum 04	Dated 31 October, 2016, the scope of the contract was varied and contract price increased by Ksh.81,930,593.25(EUR687,076) to Kshs.17,406,159,818 (EUR145,990,277) This contract was later extended on 16 November, 2016 to 31 December, 2017 to allow for completion of the Transmission Line.

1.5.69 The special audit established that, M/s. Isolux Ingenieria SA, filed for bankruptcy proceedings through the Courts of the Mercantile 44357 Madrid on 14 July, 2017. This was after the agreed completion date for construction of the Transmission Interconnector (TI) line had lapsed on 30 December, 2016.

1.5.70 Following the final extension effected on 16 November, 2016 to 31 December, 2017 to allow for completion of the Transmission Line i.e. 9-months into the final extension, with 5-months to the end, the Attorney-General in a letter Ref: AG/CONF/21/8/88 VOL.1(24) dated 3 August, 2017, wrote to the Cabinet Secretary, Ministry of Energy questioning the continued engagement of M/s. Isolux Ingeniers SA on varying works, price and the completion period despite public knowledge that they had financial challenges.

1.5.71 As a reaction to this, the special audit noted, that on 14 August, 2017, KETRACO, through a letter Ref KET/CS/S/5/1/DM/amk wrote to DEUTSCHE BANK, S.A.E, the Project Financier, informing them of their intent to terminate the commercial agreement on account of default by the contractor to meet set timelines. The letter further indicated that M/s. Isolux Ingeneria, S.A had filed a petition for bankruptcy and was in breach of the contract contemplated in the provisions of clause 15.2(h) of the commercial agreement. The letter was received and acknowledged by DEUTSCHE BANK, S.A.E via email dated 23 August, 2017.

1.5.72 On the same day, 14 August, 2017, KETRACO invoked, Clause 15.2(h) of the PPA, terminated the contract and recalled the performance security. According to Section 8.2 of the Civil Case No.345 of 2017, the guarantee of sums Kshs.1,576,200,000 (EUR14,200,000) was recalled on 14 August, 2017 from KCB Bank Limited and Commercial bank of Africa.

1.5.73 As at the time of termination of the contract, out of the varied contract sum of Kshs.17,406,159,818 (EUR145,990,227), KETRACO confirmed that a total of Kshs.10,827,050,072 (EUR83,542,053) had been paid to M/s. Isolux Ingeniers SA.

1.5.74 M/s. Isolux Ingeneria SA filed a Civil Case No.345 of 2017 in the High Court of Kenya challenging the termination of the contract by KETRACO. The case was determined, and a ruling made on 19 December, 2017 by Judge J.L. Onguto. The court dismissed the case by M/s. Isolux Ingeneria, S.A in favor of KETRACO.

1.5.75 The special audit noted that as at the time of termination of the contract agreement, there were materials on site in the custody of sub-contractors at a yard belonging to M/s. Spedag Clearing and Forwarding Agent. These materials were released to KETRACO after payment of Kshs.26,880,329 (EUR243,040). This payment was deducted from amounts owed to M/s. Isolux Ingeniers SA.

1.5.76 Following the termination of M/s. Isolux Ingeniers SA, KETRACO subsequently procured The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd, to complete the construction of the Transmission Interconnector (TI). The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd was awarded the contract on 30 January, 2018, to complete the procurement, construction, testing and commissioning of approximately 428Km of 400Kv transmission line between Loinyangalani and Suswa.

1.5.77 The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd was procured through a specially permitted procurement procedure which was approved by the Dr. Kamau Thugge, then PS at the National Treasury on 10 January, 2018 vide a letter Ref MOF/PPD/2/20/30(12). According to the special permitted bid evaluation report dated 15 January, 2018, KETRACO took a market survey by issuing bid documents to 5 contractors who were already mobilized on site working for KETRACO. Out of the 5, The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd, was most responsive and was recommended for the award.

1.5.78 The special audit noted that The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd, were contracted on 30 January 2018, and they completed the transmission line in less than 8 months, on 10 September, 2018.

1.5.79 As at the time of audit, a total of Kshs.9,510,758,935 had been paid to The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd, leaving an outstanding balance of Kshs.1,786,853,615. The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd were still owed the amount of Kshs.1,786,853,615, plus any accrued penalties thereof, which the special audit recommends settlement to avoid incurring additional or potential liability attributed to delayed payments.

1.5.80 The special audit also established that KETRACO had engaged a total of ten subcontractors picked from those sub-contracted by M/s. Isolux Ingenieria SA. This was pursuant to Clause 4.5 of the contract between KETRACO and M/s. Isolux Ingeniers SA, that provided for transfer of subcontractor to KETRACO in the event of termination of contract between KETRACO and M/s, Isolux Ingenieria SA.

1.5.81 The special audit noted that KETRACO, through the Technical Committee continued to engage with the subcontractors who had been undertaking foundation works to complete all the remaining foundations works at a total cost of Kshs.1,524,059,296.

1.6 Irregularities and Managerial Responsibility

1.6.1 The special audit identified the following irregularities and managerial responsibilities:

	Irregularity	Risk / Section of Law Violated	Value exposed to Risk	Responsibility	Section of the Report
1	Failure to ensure competitive bidding in identification of the private investor and the associated Power Purchase Agreements (PPAs) for generation of wind power at Lake Turkana Wind Power Project. This exposed the Project Budget to risk.	• Section 2 (b) of the repealed Public Procurement and Disposal Act, 2005 (PPDA) provides the purpose of the Act as to promote competition and ensure that competitors are treated fairly. • Section 3 (2) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009	Kshs. 15,709,419,61	Ministry of Energy	1.5.3 1.5.4
2	Delay in completion of Transmission Interconnection Line occasioned by bankruptcy of the project contractor. This resulted in accumulation of Deemed Generated Energy (DGE) claims	• Failure of the project to realize Value for Money • Loss of public funds	EURO 167,261,145 equivalent to Kshs. 18,499,082,637	KETRACO	1.5.13 1.5.68 to 1.5.71

	Irregularity	Risk / Section of Law Violated	Value exposed to Risk	Responsibility	Section of the Report
3	The special audit established that KPLC had not opened an Escrow Account as at the time of completion of the special audit, and was not collecting the security support surcharge or remitting the same to LTWP Ltd. KPLC was therefore in breach of this obligation as evidenced by the various monthly invoice notices sent by LTWP Ltd to KPLC amounting to EURO32,589,315. This could breach clause 15 of the PPA	Clause 10.9.5(a) of the Power Purchase Agreement required that the security support facility of Kshs.4,711,560,000.00 (Euro 42,600,000), was to be collected and remitted by KPLC into an Escrow Account	Kshs.4,711,560,000 (Euro 42,600,000.00),	KPLC	1.5.38 1.5.39
4	The special audit noted with concerns that the VAT claims by LTWP Ltd may not have been justifiable considering that taxes due on those aspects of the Project that were not covered by law were paid for by the Government as a contribution towards the Project, premised that this contribution was to be factored in the determination of a lower tariff. On the contrary, there were subsequent agreements highlighted that LTWP Ltd was to receive additional tariff increase of EUR 0.00845 per kWh (DGE Recovery Tariff) during the period from 1 June 2018 to 31 May 2024 (DGE Recovery Period) paid for by GoK which will be an extra load for the consumer/tax payers.	Value -for-Money risk for transferring extra load cost to the consumers instead for claiming VAT from the private investor. Escalating power tariffs for the consumers.	Kshs.2,785,429,737	The Ministry of Energy and The National Treasury	1.5.54

	Irregularity	Risk / Section of Law Violated	Value exposed to Risk	Responsibility	Section of the Report
5	Failure to conduct technical or financial due diligence including insolvency / bankruptcy risk assessment on the company to confirm its technical and financial ability to deliver the contract before contracting. As a result of termination of the contract agreement with M/s. Isolux Ingenieria SA, a total of Kshs.11,061,698,560 was incurred to complete the work that had been left by M/s. Isolux Ingenieria SA. It therefore implies that the termination of the contract agreement between M/s. Isolux Ingenieria SA and KETRACO resulted in an additional cost of Kshs.3,179,062,348 to finalize the construction of the transmission line	Section 68 (1) of the Public Procurement and Disposal Act 2005 requires that the person submitting successful tender and the procuring entity shall enter into contract based on the tender document	Kshs.3,179,062,348	Task Force composed of the Ministry of Energy, KPLC, KETRACO and LTWP Ltd.	1.7.5

	Irregularity	Risk / Section of Law Violated	Value exposed to Risk	Responsibility	Section of the Report
6	Due to delays in completing the transmission line, energy charge was not evacuated from the LTWP Ltd plant resulting in accrued penalties to GOK referred to as Deemed Generated Energy (DGE) claims amounting to Kshs.18,499,082,672 (EURO 167,261,145) for the period 27 January, 2017 to 10 September, 2018. GOK TI Delay DGE is the equal of the energy charge that would be payable by KPLC in respect to Deemed Generated Energy had it been delivered or evacuated by the Transmission Interconnector Line in accordance to Clause 9.3 of the Power Purchase Agreement (PPA).	Delayed completion of the project that lead to failure to realize value for money and incurring cost that does not realize value.	Kshs.18,499,082,672 (EURO 167,261,145)	Then Principal Secretary, Ministry of Energy and Managing Director of KPLC who executed the PPA.	1.5.31

1.7 Conclusion and Recommendations

1.7.1 The Lake Turkana Wind Power Project (LTWP) is located in Loiyangalani, Marsabit County, Kenya. The project wind farmland covering 160 square kilometers (40,000 acres) was leased by LTWP from the Government of Kenya for a period of 99 years.

1.7.2 The Ministry of Energy granted LTWP, a private investor, the exclusive rights to survey the project area, generate wind power and sell it to KPLC. The special audit noted that the Ministry of Energy, did not conduct competitive bidding in identification of the private investor contrary to section 2 (b) of the repealed PPDA,2005.

1.7.3 In accordance to the Power Purchase Agreement (PPA), the Government of Kenya was to construct a new 400 KV rated sub-station near Loyangalani where the wind farm was to interconnect to the national high voltage network.

1.7.4 The project developer, LTWP, completed the power generation plant in January 2017. However, the line evacuating the power generated was not fully completed by KETRACO until 24 September, 2018. The company contracted for construction of the transmission line, M/s. Isolux Ingenieria SA, became bankrupt resulting in KETRACO terminating the contract. There was no evidence that an independent financial and technical due diligence on M/s. Isolux Ingenieria SA before signing the contract had been done.

1.7.5 Therefore, as a result of termination of the contract agreement between KETRACO and M/s. Isolux Ingenieria SA, a total of Kshs. 11,061,698,560 was incurred to complete the work that had been left by M/s. Isolux Ingenieria SA. It therefore, implies that the termination of the contract agreement between M/s. Isolux Ingenieria SA and KETRACO resulted in an additional cost of Kshs. 3,179,062,348 to finalize the construction of the transmission line, thus a 17% variation over the original cost, which was within the threshold of 25 percent as per the Public Procurement Laws.

	Particulars	CRY	Amount
1	Initial contract sum with M/s. Isolux Ingenieria SA	EUR	142,038,152
2	First contract variation with M/s. Isolux Ingenieria SA	EUR	3,265,049
3	Second contract variation with M/s. Isolux Ingenieria SA	EUR	687,076
4	Final contract sum with M/s. Isolux Ingenieria SA	EUR	145,990,277
5	Final contract sum with M/s. Isolux Ingenieria SA	KSHS	18,920,339,899
6	Amounts paid to M/s. Isolux Ingenieria SA as at date of Contract termination	EUR	(83,542,053)
7	Amounts paid to M/s. Isolux Ingenieria SA as at date of Contract termination (EUR=KSHS129.6)	KSHS	10,827,050,072
8	Amounts paid to The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd		9,510,758,935
9	Amounts owed to The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd		1,786,853,615
10	Contract sum for sub-contractors		1,524,059,296
11	Payment to sub-contractors to release material at the yard		26,880,329
12	Amount recovered through performance bond		(1,576,200,000)
13	Total amounts paid plus owed as at completion		22,099,402,247
	Extra cost incurred to finalize the transmission line		3,179,062,348

1.7.6 Due to delays in completing the transmission line, energy charge was not evacuated from the LTWP plant resulting in accrued penalties to GOK referred to as Deemed Generated Energy (DGE) claims amounting to Kshs.18,499,082,672 (EURO 167,261,145) for the period 27 January, 2017 to 10 September, 2018.

GOK TI Delay DGE is the equal of the energy charge that would be payable by KPLC in respect to Deemed Generated Energy had it been delivered or evacuated by the transmission interconnector line in accordance to Clause 9.3 of the Power Purchase Agreement (PPA).

1.7.7 It is recommended that:

1. The Ministry of Energy and KPLC should be held accountable for:
   (i) Not ensuring a competitive process was followed in identification and implementation of this project to ensure fairness, transparency, equity and cost effectiveness; and
   (ii) Not conducting an independent legal risk assessment prior to execution of contracts for a capital project of this magnitude. These infractions exposed the Government, taxpayers and other partners to value for money and litigation risks for delayed payments to contractors.
2. Accounting Officers should ensure independent Legal Risk Assessments are conducted prior to execution of contracts for capital projects. This will ensure that the Government is mitigated against risks of paying unnecessary high damages such as the Deemed Generated Energy payments (DGE).
3. The Ministry of Energy should ensure involvement of all key stakeholders within the Energy sector in negotiating and signing of Power Purchase Agreements. This will mitigate against risks of committing the Government of Kenya to timelines that cannot be achieved thereby, exposing Government projects to Value for Money risks.
4. Most importantly, the Government of Kenya should build technical and financial capacity of Public Finance Management Officers in implementing projects through Public Private Partnerships (PPP). This will enhance efficiency and effectiveness in executing such projects.
5. The Management of KETRACO should identify any pending obligations plus any accrued penalties thereof from either party with The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd, so that the same can be settled in a timely manner. This will mitigate against future litigation risks and loss of public funds.

6. Further investigation should be carried out to determine any acts of anomaly on individuals involved in the entire process of the project and action taken on those found culpable.

CPA Nancy Gathungu, CBS
<u>AUDITOR-GENERAL</u>

15 July, 2021

2 INTRODUCTION AND BACKGROUND

2.1 Background

2.1.1 Lake Turkana Wind Power Project (LTWP) is located in Loiyangalani District, Marsabit County, Kenya. It comprises wind turbines, and a high voltage substation that has been connected to the Kenyan National grid through an associated Transmission Line; constructed by the Kenyan Government.

2.1.2 The Project involved construction and operation of a 310 MW of wind power to the Kenya's National grid. It comprises of 365 Vetas V52 wind turbines, each with installed capacity of 850 kilowatts. In addition, it has Wind Turbine Generators (WTGs) and their foundations, a 33kV electrical collector network, the associated overhead electric grid distribution system and a high voltage substation that connects it to the National grid.

2.1.3 The Project proponent is a consortium of private investors comprising of;

- KP&P Africa B.V and Aldwych International as Co-developers,
- Investment Fund for Developing Countries,
- Vestas Eastern Africa Limited,
- Finnish Fund for Industrial Cooperation Ltd,
- KLP Norfund Investments AS and Sandpiper.

2.1.4 Since the Project location was not serviced by any transmission line network, and in order to supply the power to the National grid through KPLC with which LTWP Ltd had entered into a Power Purchase Agreement (PPA), there was need for the development of a transmission line from Loiyangalani to Suswa where the wind farm was to interconnect to the National High Voltage Network.

2.1.5 In this regard, the Government of Kenya was to construct a new 400 KV sub-station near Loiyangalani (initially operated at 220Kv), and a 220Kv substation near Suswa and all associated works. However, KETRACO delayed completing the construction of transmission lines resulting in charges being levied against KPLC for failing to evacuate power produced. The accrued charges are referred to as (GOK) transmission interconnector Delay Deemed Generated Energy (GOK TI DELAY DGE).

2.2 Introduction

2.2.1 The Principal Secretary to the Ministry of Energy vide letter reference ME/CONF/3/2/73A, requested the Auditor- General to conduct a Special Audit on the Lake Turkana Wind Power (LTWP) in regard to payments of Government of Kenya (GOK)

Transmission Interconnector Delay Deemed Generated Energy (GOK TI DELAY DGE). (Exhibit 1)

2.2.2 The request by the PS, Ministry of Energy was subsequent to a Kenya National Assembly resolution passed on 13 June, 2019 in respect of the supplementary appropriation bill (National Assembly Bill No. 4 of 2019). The National Assembly requested the Auditor-General to carry out a special audit on the LTWP Ltd and on the payment of GOK TI Delay DGE and other outstanding payment obligations. (Exhibit 2)

2.3 Terms of Reference

2.3.1 Upon reviewing the request, the special audit developed the following Terms of References (TORs) to guide the special audit. **APPENDIX I** details how we developed the TORs.

- Historical Background of Government of Kenya (GOK) Transmission Interconnector (TI) delay Deemed Generated Energy (DGE) payments - GOK TI DELAY DGE and other outstanding payment obligations.
- Budgeting for Deemed Generated Energy (DGE)- GOK TI DELAY DGE and other outstanding payment obligations.
- Project Management and Power Purchase Agreements (PPAs).
- Deemed Generated Energy (GOK TI DELAY DGE) Expenditure.
- Construction of Transmission Line.

2.4 Scope of Work and Limitations

2.4.1 The special audit reviewed transactions covering the financial years 2010/2011 to 2018/2019 in regard to the aforementioned Terms of References.

2.4.2 The scope of work was limited to transactions at Ministry of Energy (MOE) Headquarter Offices, Kenya Electricity Transmission Company Ltd (KETRACO) and the Lake Turkana Wind Plant in Loiyangalani and Suswa Sub-Station.

2.5 Audit Approach and Methodology

2.5.1 In planning the detailed review, the team undertook a reconnaissance visit at the Ministry of Energy Headquarters Offices on 10 September, 2019 for preliminary information gathering. The team also held various planning meetings between 27 August, 2019 to 10 September, 2019. During these meetings, the team discussed activities and tasks required to deliver on the terms of reference. Finally, a detailed work plan was developed and applied in the execution of the assignment.

2.5.2 The special audit adopted the following methodologies:

- **Document review:** Public Finance Management Act 2012, The KPLC and Lighting Act, Energy Act 2006, the Government of Kenya letter of support dated 28 February, 2013, Public Procurement and Disposal Act 2005, Public Procurement and Asset Disposal Act 2015, Power purchase agreement (PPA), Budget Estimates and payment vouchers, feed in tariff (Fit). **APPENDIX II** details all documents reviewed;
- **Field visits:** Field visits to the wind farm at Loiyangalani Wind Farm and, Suswa Sub-stations;
- **Interviews:** Interviewed officers from MOE, KPLC, LTWP, KETRACO and EPRA, who clarified various issues that assisted in making an informed audit report.

2.5.3 The following officers from MOE, KPLC, LTWP, KETRACO and EPRA were interviewed:

Table 1: List of Interviewees

No.	Name	organizations	Designation	Date
1	Eng.Thakichu Kiiru	KPLC	General Manager- Business Strategy	22-Jul-20
2	FCPA Fernandez Baraza	KETRACO	Managing Director	23-Jul-20
3	Eng. Anthony Wamukota	KETRACO	Senior Project Management and Construction and Project Manager	23-Jul-20
4	Peter Njehia	KETRACO	Senior Manager Supply Chain	23-Jul-20
5	Tom Imbo	KETRACO	AG. General Manager	23-Jul-20
6	Rizwan Faizal	LTWP	Director LTWP	23-Jul-20
7	Dr. Fredrick Nyang	EPRA	Director Economic Regulation	6 August 2020- ZOOM MEETING
8	Dr. John Mutua	EPRA	Deputy Director Energy Research and Policy Analysis	
9	Caroline Kimathi	EPRA	Principal Officer Renewable Energy	
10	Patrick Mawala	KPLC	Energy Purchase Manager	
11	Eng.Richard Muiru	MOE	Power Engineering	
12	William Mbaka	MOE	Senior Deputy Director Budget	
13	Duncan Macharia	KETRACO	Company secretary and legal service General Manager	

2.5.4 The information was analyzed, authenticated and corroborated before using it as evidence in this special audit report.

2.6 Report Structure

2.6.1 This special audit report is structured as follows:

(i) Executive summary

(ii) Introduction and Background

(iii) Detailed Findings

(iv) Appendices

2.6.2 The special audit report should be read in its entirety cognizance of limitations raised. The report has covered analysis and facts as understood with aim of informing the Public Investment Committee, the Ministry of Energy and Board of Directors of KPLC and lighting company Ltd and Kenya Electricity Transmission Company Ltd for decision making.

3 DETAILED FINDINGS

3.1 Historical Background of Government of Kenya (GOK) Transmission Interconnector (TI) delay Deemed Generated Energy (DGE) payments - GOK TI DELAY DGE.

3.1.1 The Lake Turkana Wind Power Project (LTWP) is located in Loiyangalani, Marsabit County, Kenya. It comprises wind turbines, and a high voltage substation that has been connected to the Kenyan National Grid through an associated Transmission Line; constructed by the Kenyan Government through KETRACO.

3.1.2 According to the Lake Turkana Wind Power Environmental and Social Impact Assessment Report of 2009 (page Viii under acknowledgements) commissioned by Lake Turkana Wind Power Ltd and carried out by a team of consultants, the wind farm covers 160 square kilometers (40,000 Acres) situated in the Loiyangalani/ Mt. Kulal locations of Loiyangalani division in greater Laisamis sub-County, in Marsabit County. The team of consultants comprised: Professor M. Muthuri - Environmentalist/Team Leader, Ms. Pauline Ikumi-Socialist and Mr.Frank Msafiri - Resource Assessment Expert/Botanist. The land was leased from the Government of Kenya for a period of 99 years.

3.1.3 Page one of the Environmental and Social Impact Assessment Report under Project description indicate that Lake Turkana Wind Power Ltd contracted, DEWI, an international wind energy consulting firm in 2005 to carry out winds tests' after which Lake Turkana Wind Power Ltd (LTWP) submitted this test results and proposal to the Government of Kenya in April, 2006. The Government welcomed the project and granted LTWP a private investor, the exclusive rights to survey the project area and wind resources. Section 2 (b) of the repealed Public Procurement and Disposal Act 2005 (PPDA) provides the purpose of the act as to promote competition and ensure that competitors are treated fairly. The special audit noted that the Ministry of Energy did not conduct competitive bidding in identification of the private investor contrary to section 2 (b) of the repealed PPDA, 2005. In addition, section 74 of the repealed PPDA 2005 provides circumstances under which direct procurements may be used to include urgency and lack of reasonable alternative. There was no evidence that these conditions were fulfilled. (Exhibit 3)

3.1.4 It was established that there was un-signed Memorandum of Understanding (MOU) dated 12 November, 2007, that required KPLC to purchase power generated by the Lake Turkana Wind Power Project (LTWP) subject to LTWP and KPLC signing a Power Purchase Agreement (PPA). We asked for a signed MOU and the same was not availed. On 29

January, 2010, LTWP and KPLC signed a PPA requiring KPLC to purchase power generated by the Lake Turkana Wind Power Project for a period of 20 years from the date of the first commissioning of the wind power plant. (Exhibit 4)

3.1.5 The project involved construction and operation of a 310 MW of wind power to Kenya's National grid, it comprises of 365 Vetas V52 wind turbines, each with installed capacity of 850 kilowatts. In addition it has Wind Turbine Generators (WTGs) and their foundations, a 33kV electrical collector network, the associated overhead electric grid distribution system and a high voltage substation that connects it to the national grid.

3.1.6 The Project proponents was a consortium of private investors comprising of KP&P Africa B.V and Aldwych International as Co-developers, Investment Fund for Developing Countries, Vestas Eastern Africa Limited, Finnish Fund for Industrial Cooperation Ltd, KLP Norfund Investments AS and Sandpiper.

3.1.7 Since the Project location was not serviced by any transmission line network, and in order to supply the power to the National Grid through KPLC with which LTWP had entered into a Power Purchase Agreement (PPA), there was need for the development of a transmission line from Loiyangalani to Suswa where the wind farm was to interconnect to the national high voltage network.

3.1.8 In this regard, the Government of Kenya was to construct a new 400 KV sub-station near Loyangalani (initially operated at 220Kv), and a 220Kv substation near Suswa and all associated works. This is in accordance to the Power Purchase Agreement (PPA) on definition of "Transmission Interconnector" or "TI".

3.1.9 The special audit identified the following as key stakeholders involved in the project:

Table 2: Project stakeholder involvement matrix

	Entity	Role
1	Ministry of Energy	Provided GoK letter of support to LTWP
2	Kenya Electricity Transmission Company Ltd (KETRACO)	To construct transmission inter-connector (TI) from Loiyangalani at Lake Turkana Wind Power Plant (LTWP) to Suswa Sub-station. The scope entailed 434.6 kms of transmission line and associated Sub-stations at Loiyangalani and Suswa.

	Entity	Role
3	KPLC	Purchase, transmit and distribute electricity from Lake Turkana wind power
4	Energy & Petroleum Regulation Authority (EPRA) formerly Energy Regulation commission (ERC)	Offer oversight and Regulate electricity Tarrif setting and approving the changes in energy tariff.
5	Lake Turkana Wind power Project (Private Entity)	Generate wind power and sell to KPLC exclusively

3.1.10 The project developer, LTWP, completed the power generation plant in January 2017. However, the line evacuating the power generated was not fully completed by KETRACO until 24 September, 2018.The company contracted by KETRACO for construction of the transmission line, M/S Isolux Ingenieria SA, became bankrupt and therefore the contract was terminated by KETRACO which led to completion delays that resulted to GOK TI delay deemed generated energy payments to LTWP.

Transmission Interconnector (TI) delay Deemed Generated Energy (GOK TI DELAY DGE) payments

3.1.11 As per the PPA signed on 29 January, 2010 Deemed Generated Energy is, *"The electrical energy expressed in kWh as a result of KPLC system interruption or as a result of despatch instruction issued by KPLC pursuant to clause 7.3 is not generated and /or delivered to KPLC at either of the delivery points"*, While clause 1 of the PPA 2010 defines Transmission Interconnector as, *"Means the approximately 428 kilometers ,400 kv transmission line and the associated substation at Suswa including the KPLC connection point required to transport electrical energy from the plant to the new substation at Suswa"* ,the LTWP completed the power generation plant in January, 2017 but the transmission line was completed on 24 September, 2018. (Exhibit 7)

3.1.12 Energy charge was not evacuated from the LTWP plant through this transmission line due to the delay in the completion of the TI resulting to GOK TI DGE claims amounting to Kshs.18,499,082,672.39 (Euro 167,261,145) for the period 27 January, 2017 to 10 September 2018. GOK TI Delay DGE is the equal of the energy charge that would be payable by KPLC in respect to Deemed generated energy had it been delivered or evacuated by the TI line in accordance to PPA clause 9.3 and which is determined in accordance with clause 9.5 and schedule 6-part C for each month commencing from the month in which the GOK TI Delay payments commencement date occurs.

3.2 Budgeting for Deemed Generated Energy (DGE)- GOK TI DELAY DGE & construction of transmission line

Deemed Generated Energy (DGE)- GOK TI DELAY DGE

3.2.1 It was noted that KETRACO faced challenges in related to technical and financial weaknesses of the contractor. The initial agreed completion date was 31 December, 2013 which was 24 Months after signing of the contract, the date was extended by 6 months to 30 June, 2014 by the second addendum. The third addendum signed on 22 July 2016 varied the scope in the Southern part of the line, this extended the contract completion period by two and half months to 30 December, 2016.However, KETRACO did not complete the Transmission line resulting into a further extension of completion date to 24 September, 2018.

3.2.2 This led to accumulation of GOK TI Delay Deemed Generated Energy amounting to Kshs.18,499,082,672.39 (Euro 167,261,145) for the period 27 January, 2017 to 10 September, 2018 as detailed below resulting in the Ministry of Energy to allocate funds to KPLC to pay LTWP the GOK TI delay deemed generated energy.

Table 3: Accumulation of GOK TI Delay DGE Payable to LTWP BY KPLC

	Particulars	Amount due (EUROS)	Remarks
1	DGE for the period 27 January 2017 (Initial commencement date) to 15 May 2017 (1st extended commencement date)	17,722,013	-
2	DGE for the period 15 May 2017-31 May 2018 (2nd extended commencement date	127,577,128	-
	Total accrued 27 January 2017-31 May 2018	**145,299,141**	-
	Less write Off by LTWP agreed by parties	(17,722,013)	-

	Particulars	Amount due (EUROS)	Remarks
	Net amount due -27 January 2017-31 May 2018 (A)	**127,577,128**	**GOK paid EURO 46,000,000 in cash while the outstanding amount of EURO 81,577,128 was to be recovered by LTWP through a tariff increase of EURO 0.00845 / kwh for the period 01 June 2018-31 may 2024 (DGE recovery period)**
3	Due for the period 01 June 2018-24 September 2018 (Completion date)	45,197,003	-
	Less write Off by LTWP agreed by parties	(5,512,986)	-
	Net amount due - 01 June 2018-24 September 2018 (B)	39,684,017	Amount of EURO 39,684,017 paid to LTWP by KPLC through budget support from MOE
	Total DGE dues before payments	167,261,145	Total cash payments of EURO 85,684,017 while the balance of EURO 81,577,128 to be recovered by LTWP through a tariff increase of EURO 0.00845 / kwh for the period 01 June 2018-31 may 2024 (DGE recovery period). Included in this figure was the last payment made on 31 July 2019 of EURO 9,978,603 (Kshs.1,160,000,000)

(Exhibit 008)

3.2.3 Clause 9.5.1, schedule 6, part B paragraph 2 of the third amendment of the Power Purchase Agreement (PPA) dated 29 January, 2010 between KPLC and LTWP provided that, "*with effect from the 50 MW, net electrical output delivery commencement date, KPLC shall pay to LTWP, in respect of KPLC DGE, the KPLC DGE payments and in respect of TI interruption DGE, the TI interruption DGE payments, subject to conditions set*" while the original PPA did not specify the minimum number of MW from first commercial operation date, KPLC was to pay to LTWP, in respect of each KWh of deemed generated energy during a month, the amount referred to as the "Deemed generated energy payments."

3.2.4 A consultative meeting chaired by the PS Ministry of Energy was held on 05 July, 2017 attended by Officers from the Ministry of Energy, KETRACO, KPLC and Management of LTWP Co. Ltd. The meeting vide Minute 2/05/07/2017 discussed the GOK Transmitter Interconnector Delay deemed generated payments (DGE) and supported the proposed mechanism to provide the necessary budgetary allocation of Kshs. 5,658,690,000(Euro 46 Million) for the payments of DGE before 31 August, 2017.These payments were as a results of the negative complication that would arise including the calling of the Partial

Risk Guarantee (PRG to cover credit risk while GOK was to cover political risk) issued by the African development fund (ADF PRG LC) which was set to expire on 31 July, 2017 and all the additional risk and consequences to Kenya in the event of such call on the ADF PRG LC. LTWP was under pressure to start repaying the loan from their financiers which was due yet GOK could not purchase the power due to delay in completing evacuation line. The consultative meeting therefore agreed that the Kshs.5,658,690,000 (Euro 46 Million) be paid to them before 31 August, 2017 to be able to meet their financial obligation. (Exhibit 5)

3.2.5 The then National Treasury Principal Secretary Dr. Kamau Thuge through letter Ref.No.DMD.4/243 dated 3rd August 2017 addressed to the PS State Department of Energy Dr. Eng. Joseph Njoroge, concurred with the consultative meeting resolutions held on 5 July 2017 to allocate the necessary funds to KPLC. The PS National Treasury gave authority to Ministry of Energy and Petroleum to pay Kshs. 5,658,690,000 (Euros 46 million) to LTWP. This payment was also concurred by the PS Ministry of Energy through letter Ref.No.ME/CONF/1/3/12 (20) dated 17 August, 2017 (Exhibit 6).

3.2.6 The special audit established that the Ministry of Energy approved and disbursed Kshs. 10,298,690,000 to KPLC to finance the GOK TI DGE payments as summarized below and detailed in **APPENDIX III** (Exhibit 07)

Table 4: Ministry of Energy disbursement to KPLC for GOK TI DGE payments

Financial year	Approved estimates	Date	Amount (Kshs)	Total DGE Paid (Kshs)	
2017/2018	6,818,690,000	06 September 2017	5,658,690,000	5,658,690,000	Ref No. DMD 4/324 Dated 3 August 2017 And Letter Ref No.ME/CONF/1/3/12(20) dated 17 August 2017
2017/2018		June 2018	1,160,000,000	4,640,000,000	Letter Ref No.ME/CONF/2/1/1 dated 16 July 2018
2018/2019	10,768,000,000	12 September 2018	1,422,972,444		Letter Ref No.ME/SDE/EXC/D/02 Dated 11 September 2018

2018/2019		07 November 2019	897,027,556		Disbursed through letter Ref No.ME/SDE/EXC/D/0 dated 9 November 2018
2019/2020	1,160,000,000	31 July 2019	1,160,000,000		
	18,746,690,000	Total	10,298,690,000	10,298,690,000	

3.2.7 The special audit established that the Ministry of Energy disbursed Kshs. 1,160,000,000 to KPLC through department voucher 0003 of 31July, 2019 in financial year 2019/2020. The amount was provided for through budget supplementary appropriation bill No.47 of 12 June, 2019 vote 1152 programme 0213000 approved vide letter Ref No.ME/EXC/DV/19/02 dated 30 July, 2019.This amount was in relation to payment to Lake Turkana Wind power Project (LTWP) for Government of Kenya (GOK) Transmission Interconnector (TI) delay Deemed Generated Energy (DGE) payments - GOK TI DELAY DGE as the last installment of cash disbursement. (Exhibit 8).

Budget for construction of Transmission Line by KETRACO

3.2.8 The special audit established that for the financial years 2013/2014 to 2018/2019 KETRACO had budgeted Kshs. 30,220,000,000 towards the construction of the Loiyangalani -Suswa line, as summarized in the table below:

Table 5: Budget provision by KETRACO for construction of Loinyangalani -Suswa line

Year	Budgets (Kshs)	Actual(Kshs.)
2013/2014	1,815,000,000	0
2014/2015	2,760,000,000	3,604,000,000
2015/2016	2,754,000,000	0
2016/2017	9,970,000,000	3,243,000,000
2017/2018	3,313,000,000	2,737,000.000
2018/2019	9,608,000,000	10,768,000,000
TOTAL	30,220,000,000	17,617,737,000.

3.2.9 The construction of the Transmission line was funded by GOK through KETRACO, the Spanish Government and Duetshe bank. Out of the total budget of Kshs. 30,220,000,000, the Ministry of Energy and Petroleum disbursed an amount of Kshs. 17,617,737,000 to KETRACO for the period 2013/2014 to 2018/2019. (Exhibit 9)

3.3 Project identification, implementation and Power Purchase Agreements (PPAs)

3.3.1 This section reviews project identification and implementation of the Power Purchase Agreement (PPAs) as follows:

Table 6: Project identification, implementation and PPAs

	Particulars	Key parameters
1	Project Identification	• Triggering factor for the need of the PPA
2	Project Implementation	• Private Public Partnership (PPP) • Roles of stakeholders
3	Power Purchase Agreement-PPAs	• Terms and Conditions • Approvals of PPAs • Amendments and variations of PPAs

Project Identification

3.3.2 Lake Turkana Wind Power Project Ltd (LTWP) is a private entity located in Loiyangalani, Marsabit County established in 2006 out of a partnership between Anset Africa Limited and KP&P. It was financed through a consortium of financiers comprising of KP&P Africa B.V and Aldwych International as co-developers, Investment Fund for Developing Countries, Vestas Eastern Africa Limited, Finnish Fund for Industrial Cooperation Ltd, KLP Norfund Investments AS and Sandpiper.

3.3.3 LTWP Ltd made a proposal to the Government of Kenya (GOK) on the construction of the wind power plant and selling of the energy generated to KPLC. According to the needs analysis report, the project was to increase Kenya's national power generation by 17%. LTWP invested in the project's preparations and requisite feasibility studies to put up the 300-Megawatt wind farm at Loiyangalani. It had installed the first wind data gathering mast in 2006 and they collected wind data at the site for 6 years.

3.3.4 According to a letter Ref. No Cof.193/01 dated 22 May, 2009 containing a Cabinet Memorandum on the proposed implementation of three unsolicited Power Generation Projects (including LTWP) under Public Private Partnership (PPP), the PS at the Ministry of Energy (MOE) noted that the National Treasury was of the opinion that the project requires further thought before implementation, and confirmation of its cost effectiveness and that it should be at the least cost possible. (Exhibit 10)

3.3.5 However, through a letter Ref No.ME/CONF/3/73A dated 25 May, 2009, Mr. Patrick M. Nyoike, then Priciapal Secretary under the Ministry of Energy wrote to Eng. Joseph Njoroge, then KPLC Managing Director and informed him that the project implementation did not warrant any Cabinet approval and that they should fast track conclusion of the PPAs to facilitate implementation. The Ministry of Energy through letter Ref No.ME/CONF/3/2/73 dated 20 August, 2009 informed KPLC Managing Director of the full GOK support towards LTWP project.

3.3.6 KPLC, then wrote to the Energy and Petroleum Regulatory Authority (EPRA) (formerly ERC), inquiring for approval of initial PPA through letter Ref No. KPLC1/2/3/3 dated 9 November, 2009. The PPA arrangement was approved by KPLC board on 4 November, 2009 that would result in LTWP selling 300MW of power to KPLC. The Board further resolved that management should write to the Ministry of Energy confirming the Board resolution. However, no evidence was availed indicating that KPLC ever wrote to the Ministry of Energy confirming the Board resolution. (Exhibit 11).

Project Implementation Model: Feed in Tariff Policy and Public Private Partnership Arrangement

3.3.7 On 29 January, 2010, Lake Turkana Wind Power (LTWP) Ltd entered into a contract with KPLC through a Power Purchase Agreement (PPA). According to section 3 (e) and clause 2 section (b) of the PPA /contract, LTWP was to finance, design, procure, construct, install, test, commission, operate and maintain the plant in accordance with Prudent Operating Practice, and sell the net electrical output exclusively to KPLC. On the other hand, KPLC was to take delivery of all net electrical output and pay energy charges for such net electrical output.

3.3.8 The Ministry of Energy and KPLC noted that the signing of the PPA was guided by the Feed-in-Tariff policy. A Feed-in-Tariff allows power producers to sell renewable energy generated electricity to an Off-taker (in this case KPLC) at a pre-determined tariff for a given period of time. Renewable energy sources in Kenya includes wind power, biomass, small hydro, solar, biogas and geothermal. According to the initial issue Feed-In-Tariff Policy of March 2008 (page 10), LTWP Ltd was to produce power of about 300MW, which was to be sold to KPLC at a rate of Kshs.7.65 (Euro 0.0722) per Kilowatt (Kwh) which was lower than the ERC(EPRA) recommended Feed-In-Tariff range of Kshs.11.00. (Exhibit 12)

3.3.9 The special audit however noted that through letters Ref No.Conf.193/01 "TY" dated 29 May, 2009 and Ref No.ME/CONF/3/2/73A dated June 2009 that this was a Public Private Partnership (PPP). PPP arrangement ought to have been governed by the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009. Section 3 (1) (e) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009 describes the aforementioned PPP arrangement as a Build-Own-Operate Scheme whereby a private party designs, finances, constructs, owns, operates and maintains the infrastructure facility and provides services at agreed terms. (Exhibit 13)

3.3.10 Section 3 (2) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009 provides that except as provided for under these Regulations, all Public Private Partnership projects shall be procured through a competitive bidding process as provided for under these Regulations or any other written relevant law. The special Audit noted that there was no evidence of competitive bidding for this PPA arrangement neither was there any justification for exception of the same, contrary to Section 3 (2) of the Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009.

3.3.11 Section 13 (1) of the PPP Regulations of 2009 also requires that when conceptualizing, identifying and prioritizing potential PPP projects, procuring entities shall consider the strategic and operational benefits of a Public Private Partnership, compared to the continuing performance of the function by the procuring entity. There was no evidence inform of a feasibility assessment report independently conducted by KPLC to establish the technical and economic viability of the project idea before implementation. Instead, the management of KPLC relied on a feasibility study conducted by the private investor which lacked independency and could have present a potential conflict of interest.

3.3.12 The special audit also established that the Government of Kenya prepares periodic plans which highlights the energy requirements of the country through the Least Cost Development Plan of 2011-2031. According to a Cabinet Memorandum on the status of implementation of Lake Turkana wind power project (LTWP) Ltd, dated and signed on 8 January, 2013 by both the Minister of Finance and Minister of Energy, the Cabinet noted that the estimated country's unconstrained electricity demand was 1500 Megawatts, against an effective capacity of 1370 Megawatts which was available on average. Due to power generation transmission and distribution system constrains, the recorded suppressed peak demand was 1300 megawatts. The installed capacity was not able to meet existing demand and there was no reserve capacity to cater for the plant breakdown. Given the small size of the Kenya electricity system, a reserve capacity of at least 30% (400 megawatts) was required. To address this electricity demand, the Ministry of Energy was implementing several projects to meet this demand and one of the projects was the 300 megawatts Lake Turkana Wind Power farm to be completed by September 2014. (Exhibit 14).

3.3.13 The special audit team noted that KPLC entered into a consultancy service agreement with Linklaters LLP on 27 December, 2011 to review the LTWP PPA and establish the suitability of the existing PPA for a wind power generation asset including Risk allocation, take-or-pay obligation and Deemed Generated Energy. However, the consultants' legal opinion was not availed by KPLC to the special audit team (Exhibit 15)

3.3.14 The project comprised of 365 wind turbines, each with a capacity of 850 kW, capable of producing a total capacity of 310 MW of energy, a substation was constructed that connected the plant to the National grid through a Transmission Line.

3.3.15 This project was implemented in two phases, the first phase was construction of the Power Plant by LTWP, and the second phase was construction of the Transmission Interconnector line by KETRACO.

3.3.16 The obligation of KPLC to pay LTWP Ltd was to commence as soon as the construction of 65 turbines were complete. According to the PPA, the 65 turbines would produce a total of 50 MW subject to confirmation by an independent engineer. An independent Engineer was appointed by LTWP Ltd with consent of KPLC for purpose of testing the project to confirm production.

3.3.17 The various stakeholders and their roles in the implementation of this project were as follows:

Table 7: Role of each player in the LTWP project

	Entity	Ownership	Role
1	Ministry of Energy (MOE)	GOK Entity	Provided GOK letter of support to LTWP Facilitate the provision of Partial Risk Guarantee (PRG). Facilitate the opening of the Escrow account. Provide funds for Construction of the TI line.
2	KPLC	GOK Entity	Power off-taker on the basis of negotiated Power Purchase Agreements for transmission, distribution and supply to consumers from Lake Turkana wind power.
3	Energy & Petroleum Regulation Authority (EPRA) formerly Energy Regulation Commission (ERC)	GOK Entity	Responsible for regulation of the energy sector, oversight, coordination preparation of Least Cost Power Development Plans (LCPDP), and monitoring and enforcement of sector regulations. Approved the PPA, PPA amendments and variation and in charge of approving the changes in energy tariff.
4	Lake Turkana Wind Power (LTWP) Ltd (Private Entity)	Private Entity	Build, own and operate the LTWP plant and to Sell and deliver electricity/Generate wind power to KPLC exclusively.
5	DEWI GmbH (Deutsches Windenergie Institut), (Later acquired by UL (Underwriters Laboratories)	Private Entity	Carried out wind tests' in the wind farm for LTWP.
6	KEMA (Later acquired by DNV GL) and KPMG, a private consulting firm	Private Entity	Carried out the Technical and Financial evaluation for a Lot.
7	Kenya Electricity Transmission Company Ltd (KETRACO)	GOK Entity	To construct Transmission Inter-Connector (TI) from Loiyangalani at Lake Turkana Wind Power Plant (LTWP) to Suswa Sub-station. The scope entailed 434.6 kms of transmission line and associated Sub-stations at Loiyangalani and Suswa.

Power Purchase Agreement (PPA) and EPRA Approval

3.3.18 According to minutes of the 19th special meeting of the Energy Regulatory Commission (ERC) dated 2 September, 2011 Chaired by Eng. Emma Kiilu, under minute number, Min/ERC/sp.58/19/2011 Paper No.168/2011, MOE instructed KPLC to enter into negotiation for Power Purchase Agreement (PPA) with LTWP in respect of the sale and purchase of energy to be generated from the wind power plant. It is noted that the PPAs were negotiated by the parties and approved by the Energy Regulation Commission (ERC) on 11 December, 2009 and executed on 29 January, 2010 by KPLC and LTWP with the following provisions:

- KPLC is licensed to purchase electricity and to transmit and distribute electricity in the republic of Kenya;
- LTWP wishes to develop a 300 MW wind turbine farm in Loiyangalani in the Marsabit County of Kenya;
- LTWP has agreed to sell and deliver exclusively to KPLC, and KPLC has agreed to purchase the electricity produced by the plant on the terms and conditions provided in this agreement and parties have agreed to enter into a power purchase agreement; and
- This agreement is the Power Purchase Agreement agreed between the parties. (Exhibit 16)

3.3.19 On 4 November, 2009, KPLC Board of Directors vide minute BM/88/09, resolved that in order to minimize the risks with the project design, they suggested splitting of the wind farm into 3 groups of 100 MW each and providing reactive power compensators. We established that LTWP provided KPLC with reactive power STATCOM units and 30MVAR static reactive power installed and built as per the project design indicated in the PPA Schedule 1-part A 1.4 on substation. LTWP installed three dynamic reactive power compensation system (DRPCs) as resolved by KPLC Board of Directors vide minute BM /88 /09. The DRPC reactive power provides stability through voltage control at Loiyangalani. (Exhibit 17)

3.3.20 The PPA signed on 29 January, 2010 also contained the following terms and conditions;

- LTWP Ltd was to sell to KPLC 300 MW of Energy at a cost of Kshs. 7.65 (Euro 0.0722) per Kilowatt hour (Kwh);

- The power produced by LTWP was to be bought at a fixed price by KPLC over a 20-year period;
- The energy of up to 55% load factor mounting to 1,445,400 KWH is on guaranteed take or pay basis;
- KPLC will compensate LTWP Ltd for lost production (Deemed Generated Energy);
- The PPA assumes that the Government will provide a sovereign guarantee to cover political risks and payment defaults by KPLC; and
- The Transmission line will be developed by either affiliate of LTWP or by the Government.

3.3.21 Section 3 of the PPA on "conditions of precedent and effective date" provides for conditions to be fulfilled before signing of the PPA. The special audit established that, the Energy Regulatory Commission, issued an electric Power Generation license to Lake Turkana Wind Power Limited on 16 December, 2010 License Ref No. G1.01.11. The grant to this license was according to the provisions of section 6(a), 27 and 31 of the Energy Act, 2006. The license is specified and limited to the 300 MW wind electric power generation plant which was to be procured, constructed, installed, owned, maintained and operated by the licensee. The license was to continue in operation from the date of commencement for a duration of twenty (20) years. (Exhibit 18)

Amendments and Variations to PPA

3.3.22 Clause 1.1 of the PPA dated 29 January, 2010 under defined terms provides that the PPA may be supplemented or amended from time to time. In this regard, there was a total of three amendments and two variations as follows:

Table 8: PPA amendments and Variations

Amendment	Date of amendment	Variations
First amendment	29 September, 2011	N/A
Second amendment	14 September, 2012	N/A
Third amendment	13 May, 2013	1st variation 31July, 2014
		2nd variation 19 September, 2017

(Exhibit 19)

3.3.23 Amendments to the PPA were meant to address needs that emerged after the PPA contract had been signed. These amendments were attached to the PPA and treated as part of the PPA while the two variations were effected on the third amendment to the PPA which addressed changes on the effective date and calculation of the Deemed Generated Energy (DGE).

A) First amendment

3.3.24 The first amendment to the PPA between LTWP Ltd and KPLC dated 29 September, 2011 was approved by EPRA board on 2 September, 2011 under MIN/ERC/SP.58/19/2011. The PPA was amended to take care of change in security support that was being provided to Lake Turkana Wind Power Limited by the Government of Kenya and recognition that now the Transmission Interconnector was to be developed and owned by KETRACO. (Exhibit 20)

3.3.25 According to the minutes of KPLC Board of Directors dated 29 July, 2011, under Minute BM/32/11, LTWP Ltd had sought negotiation of the PPA entered in January, 2010 due to the following reasons (Exhibit 21):

- Increase in the project cost by 14%;
- Increase in the cost of dynamic power compensators system from EUR 18Million to EUR 43Million;
- Change on the project security package being provided by the Government of Kenya to LTWP Ltd; and
- Re-allocation of the Transmission Line risk to the Government of Kenya;

3.3.26 The KPLC Board of Directors deliberated and resolved to increase the project cost by 14% from Euro 541 million in 2008 when the tariff of Euro cents 7.22/kWh was agreed to Euro 617million. The increase in project cost was as a result of increase in equipment costs and in the scope of works after firming up the exact work to be undertaken. When the tariff was agreed, parties had agreed at an increase of energy charge rate by Euro cents 0.30/KWH or 4% from Euro cents 7.22/ KWh to Euro cents 7.52/Kwh. The Ministry of Energy had consented to the proposed increase of the Energy Charge Rate. The Board also approved a further increase in the cost of the Dynamic Reactive Power Compensator (DRPC) system from the cost assumed in the tariff of EURO 18 million to EURO 43 million. DRPC system was found necessary for voltage control to ensure that the 300MW of wind power could be delivered into the system.

3.3.27 Under clause 10.9 and clause 14.6(c) of the PPA signed on 29 January, 2010, GOK would provide a sovereign guarantee to LTWP for commercial default if KPLC is unable to fulfil its payment obligation under this agreement. However, in May 2010 the Government resolved that the sovereign guarantee could not be provided and attempted to structure an alternative security package with the World Bank and the Multilateral Investment Guarantee Agency (MIGA) to cover payment in the event of termination of PPA (political risk mitigation) and also comprised of letter of credit guaranteed by the International Development Association (IDA) to cover payment default (KPLC credit risk mitigation). It is noted that the World Bank through a letter dated 6 October 2012 to the Permanent Secretary, Ministry of Finance declined to support the LTWP Project as it was structured giving reasons and proposed options to mitigate the risk they had identified towards the project. (Exhibit 22)

3.3.28 According to KPLC Board minutes dated 7 May, 2013 under Min BM/21/13 and Cabinet Memorandum on the status of implementation of the Lake Turkana Wind Power (LTWP), the World Bank withdrew its intent to provide Partial Risk Guarantee (PRG) support of the project as designed citing the following reasons;

a) The large size of the plant could impact on the reliability of systems supply advising that Kenya should develop wind power gradually in smaller lots(50-100MW) and to procure on competitive basis to ensure cost effectiveness and to integrate variable wind into the grid.

b) The take -or-pay obligation in the PPA exposed KPLC to unacceptable high financial risk of payment of curtailed energy which KPLC would not be able to dispatch due to system constraints.

c) The timeline then for construction of the transmission line from Loiyangalani was very short of 26 Months. This period was inadequate and KPLC will be paying for power that will not be utilized.

d) KPLC lacks experience in managing dispatch from a large wind power installation into its power system and the project would cause system instability.

3.3.29 **All these red flags were inadvertently not considered by the project stakeholders.**

3.3.30 Withdrawal of World Bank from providing the security facility and in view of risks associated with operations and failure by KPLC to honor invoices for Net Electrical Output once the wind farm was in operation, KPLC proposed an alternative security payment as follows:

- Letter of credit of Euros 15.9 million;

- Payment of monthly security support charge of Euro cents 1.86KWh for every unit sold by LTWP into an Escrow Account until this credit reaches Kshs. 4,711,560,000.00(Euro 42,600,000.00) in the Escrow account.

3.3.31 According to the minutes of KPLC Board Min BM/21/13 dated 7 May 2013, as an alternative payment security, a Partial Risk Guarantee was issued by the African Development Fund (ADF PRG LC), which underwrote any default of GOK TI delay DGE payment obligations to LTWP by KPLC in the event of delay in completing the 400 kV Loinyangalani-Suswa transmission project within the time required under the PPA. This security structure was a pre-condition by LTWP's financiers (including African Development Bank, European Investment Bank, Standard Bank, Nedbank, Netherlands Development Finance Company (FMO), PROPACO, DEG, PTA Bank and others) for the project to receive debt financing (Exhibit 24).

3.3.32 According to Clause 10.9.5(a) of the PPA, the special audit noted that the security support facility was to be collected and remitted by KPLC into an Escrow Account which was to be established as a security for KPLC payment obligation to LTWP Ltd under the PPA.

3.3.33 The facility comprised monthly payment of security support charge of EURO cents 1.86KWh for every unit sold by LTWP Ltd as per the PPA definition of security support rate. LTWP Ltd through a letter dated 5 October, 2016 to the Managing Director, KPLC, requested for appointment of an Escrow Agent having indicated in their proposal (Exhibit 25).

3.3.34 As a requirement under clause 10.9.5(a) of the PPA, the special audit team noted that KPLC had not opened the Escrow Account as at the time of completion of the special audit and is not collecting the security support surcharge or remitting the same to LTWP.

3.3.35 The Government of Kenya (GOK) entered into direct agreement with the project's lenders pursuant to the GOK letter of support after the withdrawal of the World Bank which was to provide Partial Risk Guarantee for the project. According to minutes of the first Cabinet Committee meeting held on Thursday 24 January, 2013, the Cabinet under Min 7/13 approved GOK letter of support and noted that the Partial Risk Guarantee (PRG) was to be provided by Africa Development Bank. The direct agreement between GOK and LTWP lenders was cleared by KPLC Legal Advisors (Hamilton Harrison and Mathews) through letter REF 42/K0017/1452 dated 22 August, 2014 and the Attorney

-General of Kenya noting that the proceedings taken by GOK in signing the GOK letter of support had the legal basis of law. (Exhibit 26)

3.3.36 Clause 2.4 of the original PPA signed on 29 January, 2010 had envisaged that either Transco Company Ltd will enter into the Transmission Interconnector contract and supply and install the Transmission Interconnector or the GOK (or its nominee) will supply and install the Transmission Interconnector in order to facilitate the transport of electrical energy from the LTWP to the KPLC system.

3.3.37 In response to unreferenced letter from Chairman of LTWP dated 14 January, 2009, the Principal Secretary, Ministry of Energy, Mr. Patrick Nyoike, through a letter Ref.No.ME/CONF/3/2/8, dated 30 January, 2010, confirmed that the Transmission Interconnector (TI) line project will be undertaken by the Government of Kenya (GOK) through Kenya Electricity Transmission Company (KETRACO). This position was further confirmed by GOK to the African Development bank in a letter Ref: AFDB/KEFO/RR/08/02/10 dated 08 February 2010 (Exhibit 27).

B) Second Amendment

3.3.38 On 5 September, 2012, through letter Ref. ERC/ER/2/15, EPRA approved the amendment to the PPA dated 29 September, 2012 to change the effective date from 31 December, 2011 to 31 December, 2012 (Exhibit 28).

C) Third Amendments

3.3.39 On 6 May, 2013, through a letter Ref. ERC/ER/2/2015, EPRA approved amended PPA dated 13 May, 2013 for the 300MW power generating plant at Loiyangalani, Marsabit to take care of the security support facility. This security support facility was to be collected and remitted by KPLC into an Escrow Account established as security for KPLC's payment obligations to Lake Turkana Wind Power under the Power Purchase Agreement in respect of the 300 MW wind (Exhibit 29).

3.3.40 According to clause 10.9.5(a) of the PPA, the special audit noted that the security support facility of Kshs. 4,711,560,000 (Euro 42,600,000.00), was to be collected and remitted by KPLC into an Escrow Account which was to be established as a security for KPLC payment obligation to LTWP under the PPA. This was approved by the then ERC on 14 January, 2014 vide Kenya Gazette Notice No. 281. (Exhibit 30).

3.3.41 As a requirement under clause 10.9.5(a) of the PPA, the special audit team noted that KPLC had not opened the Escrow Account as at the time of completion of the special audit and is not collecting the security support surcharge or remitting the same to LTWP Ltd. In a Letter dated 27 November, 2018, by LTWP Ltd to KPLC, LTWP sought an update on the Escrow Account since an agent had not been appointed as at that time. KPLC is in breach of this obligation and has not provided LTWP with the requisite security. This is evidenced by the various monthly invoice notices sent to KPLC by LTWP (Exhibit 31)

3.3.42 LTWP has been sending monthly invoice reminders to KPLC to pay the security support surcharge however, this amount remains outstanding. According to a letter dated 1 January, 2020, from the Executive Director of LTWP Ltd to KPLC, a total of EURO32,589,315, security support surcharge has accumulated at a rate of Euro 0.0186 of the total net electrical output per month as detailed below:

Table 9: Security support surcharge

Period	Total Net Electrical Output	Security support surcharge rate (Euro)	Security Support Surcharge Amount (Euro)
Nov/18	124,989,100	0.0186	2,324,797
Dec/18	125,895,600	0.0186	2,341,658
Jan/19	139,924,500	0.0186	2,602,596
Feb/19	137,038,800	0.0186	2,548,922
March/19	135,638,100	0.0186	2,522,869
April/19	135,787,400	0.0186	2,525,646
May/19	159,132,000	0.0186	2,959,855
June/19	91,618,600	0.0186	1,704,106
July/19	122,387,200	0.0186	2,276,402
August/19	148,216,300	0.0186	2,756,823
Sept/19	148,869,300	0.0186	2,768,968
Oct/19	131,628,600	0.0186	2,448,291
Nov/19	109,209,900	0.0186	2,031,304
Dec/19	41,778,300	0.0186	777,076

Period	Total Net Electrical Output	Security support surcharge rate (Euro)	Security Support Surcharge Amount (Euro)
			32,589,315

3.3.43 Clause 10.9.5(a) of the PPA, provides that the security support charges in respect of a month, shall be payable by KPLC into the Escrow Account by the last business day of the following month. However, we established no evidence that security support charge had been levied to-date by KPLC to customers even though it was approved by the then Energy Regulatory Commission (ERC). KPLC is therefore in breach of its contractual obligations that exposes Government of Kenya to risks of paying penalties.

3.3.44 Clause 15 of the PPA provides that LTWP Ltd is entitled to send a default notice to KPLC and eventually entitle LTWP under clause 15.6 of the PPA to terminate the PPA. Under clause 15.6.2, *KPLC would thereafter be under obligation to pay the 'Transfer Amount', which is defined under the PPA as a sum of the Project Cost (being the total value of LTWP's investment) and a payment to the shareholders of an equivalent of the Net Present Value of the budgeted profits for 5 years discounted at 10% (clause 15.6.2 (ii)).*

3.3.45 Clause 15 of the PPA estimated this cost as follows:

Project Cost = EUR 706m + Compensation to shareholders discounted at 10% = EUR 169m

Total estimated loss to the GOK = EUR 875m (US$ 1,050m).

(d) PPA Variations

i. First PPA Variations

3.3.46 The third amendments dated 13 May, 2013, contained two variations attached to the PPA. In the first variation dated 31 July, 2014, the long stop effective date was changed from 30 July, 2014 to 30 November, 2014 or such dates as may be agreed by the parties from time to time.

ii. Second PPA Variation

3.3.47 Through a letter dated 7 September, 2017, Ref. ERC/ER/2/5/JM/cm, Energy and Petroleum Regulatory Authority (EPRA) gave approval of the second variation agreement in respect of PPA dated 13 May, 2013, the PPA variation was dated 19 September, 2017.

The variation was to incorporate Deemed Generated Energy (DGE) Payments. The second variation agreement captured the resolution that was agreed upon in the consultative meeting held on 5 July, 2017 that recognized the DGE payments for the period 15 May, 2017 to 31 May, 2018 and gave an estimate of Euro 127,577,128.32 out of the Euro 46 Million was paid in cash by GoK to LTWP Ltd, and balance to be paid through the tariff increase in the energy charge rate of Euro 0.00845/Kwh applicable over a period of six (6) years from 1 June 2018 to 31 May 2024. **(Exhibit 32)**

3.3.48 Part II Section 6(i) of Energy Act, chapter 314 of the revised edition of 2012 mandated Energy and Petroleum Regulatory Authority (EPRA) to set, review and adjust electric power tariffs and tariff structures, and investigate tariff charges, whether or not a specific application has been made for a tariff adjustment. The PPA tariff changes were approved on 6 September, 2017 by EPRA through a letter Ref: ERC/PPA/KPLC-LTWP PPA/2017. (Exhibit 33)

Consultative meeting on PPA and delivery framework for Transmission Interconnector (TI)

3.3.49 According to a consultative meeting held on 5 July, 2017, there was a disagreement between LTWP Ltd and KPLC on matters pertaining the Deemed Generated Energy (DGE) payments. The meeting was chaired by the Principal Secretary, Ministry of Energy and attended by fourteen (14) Government of Kenya (GOK) officers and five (5) LTWP Ltd officers as detailed in **Appendix V**. (Exhibit 34).

3.3.50 The meeting resolved that there was need to vary the PPA to accommodate the mode of paying DGE payments to avoid a large one-off payment that would otherwise have been required to be paid by GOK. These payments related to commissioning of the first 50MW launched on 27 January, 2017 by LTWP as was defined in the PPA. The milestones agreed by the consultative meeting is summarized below;

Table 10: Agreement dates from the consultative meeting

Dates	Deliverable	Remarks
27 January, 2017	Commissioning date	15 May, 2017 was agreed as the cold commissioning date

Dates	Deliverable	Remarks
15 May, 2017	GOK TI (Transmission Interconnector) Delay DGE Commencement date payments	It was agreed that invoices relating to Period between 27 January, 2017 to 15 May, 2017 be written off by LTWP and GOK (Amount of EURO 17.7M)
15 May 2017-31 May, 2018	Expected revised TI-Operation Date	To allow TI to be completed, Period between 15 May, 2017 and 31 May, 2018 (381 Days) total GOK TI payment of EURO 127M of which Euro 81.577m was deferred and EUR 46 M paid by GOK to LTWP
24 September, 2018	TI-Operation Date	Commencement of production and distribution of Net Electrical Output

(a) Commissioning Date

3.3.51 Pursuant to clause 6.3 and part A 1 of the 5th schedule of the PPA, the special audit team noted that prior to commissioning of the initial number of electric charge units with the capacity of at least 50MW, LTWP notified KPLC of the first units commissioning date through letter REF: KPLC/2016/01/008 and KPLC/2016/01/006 dated 3 October, 2016. KPLC acknowledged these letters through letters Ref No. KP1/3C/2/16/2/515/GM, BS/jkm dated 11 October, 2016. (Exhibit 35)

3.3.52 The special audit established through review of unreferenced letter dated 24 September, 2018, by Lars Olesen, General Manager LTWP to the Acting Managing Director and Chief Executive Officer of KPLC) that both KPLC and LTWP took various steps required prior to the occurrence of the first unit commissioning date which include delivery by LTWP to KPLC of the plan setting out the layout of wind turbines strings on the site, the appointment of the Independent Engineer (Mott Macdonald Limited) and agreement on the operating and dispatch procedure for the plan. (Exhibit 36).

3.3.53 According to Clause 9.5 of the PPA, after the First Commercial Operation date of 27 January, 2017, KPLC shall pay to LTWP in respect of each KWH of Deemed Generated Energy during a month the amount (The deemed generated energy payment) equal to the energy charges that would have been payable in respect of such DGE had it been delivered at either of the delivery points.

3.3.54 LTWP notified KPLC of the occurrence of the first commercial operation date in accordance with clauses 6.3, 6.4 and 6.5 of the PPA. A Letter Ref No. KPLC/2017/01/015 dated 27 January, 2017, of the first unit deemed commissioning and the commissioning certificates comprising of 119 wind turbines generators representing an installed capacity of 101.15MW commissioning certificates was issued on 24 January, 2017 by the Independent Engineer, Mott Macdonald Limited. The audit team noted that LTWP and KPLC were in a deadlocked on the exact Deemed Commissioning date as defined under schedule 13 of the PPA, with LTWP being of the opinion that the Deemed Commissioning date was 27 January 2017 while KPLC was of the opinion that the Deemed Commissioning Date had not been achieved and at the earliest was to be on 15 July, 2017. (Exhibit 37).

3.3.55 In accordance to clause 6.11 of the PPA, LTWP and KPLC were to appoint an independent engineer who will give an independent opinion on whether the project was available (i.e. project was in production). LTWP was required to demonstrate that the project was mechanically available which was the responsibility of the Independent engineer. LTWP recruited and appointed independent Engineer, Mott MacDonald Limited on 2 June, 2016.

3.3.56 Pursuant to clause 6.11 of the PPA, LTWP wrote a letter Ref KPLC/2016/01/003 dated 28 April, 2016 to Company Secretary of KPLC seeking approval of the appointment of the Independent Engineer. KPLC approved and confirmed the Independent Engineer through a letter Ref No. KPI/3C.1/515/GMBS/jkm dated 6 May, 2016. (Exhibit 38)

3.3.57 According to clause 6 of the PPA, LTWP was required to demonstrate that the project was mechanically available through testing and commissioning. This was for purpose of cold commissioning of the project that to facilitate payments of the DGE dues. LTWP appointed Independent Engineer (Mott Macdonald) issued commissioning certificates dated 25 January, 2017 confirming that LTWP was ready to deliver energy ('cold commissioned'). Since the Transmitter Interconnector (TI) line was not available, it was not possible to generate electricity and deliver it to the metering point at the Sub-station in Suswa. The Independent Engineer confirmed availability of 119 wind turbines generators representing an installed capacity of 101.15MW and form of 33KV collection network. (Exhibit 39)

(b) GOK TI Delay DGE Commencement date

3.3.58 It was agreed during the consultative meeting of 5 July, 2017, that for purposes of Commercial calculations, 15 May, 2017 would be accepted as the date from which GOK TI Delay DGE Payments would be calculated and a monthly Delayed Deemed Generated Energy payment [GOK DGE Payments] of Approximately Kshs. 0.98 Billion a month. This amount was an approximate monthly DGE estimate agreed by the stakeholders at the consultative meeting.

(c) Expected revised Transmission Interconnector (TI) -Operation Date

3.3.59 We established that the management of LTWP completed the plant construction and issued a commissioning certificate dated 27 January, 2017 which was the deemed commissioning date. However, KETRACO had not completed constructing the Transmission-Interconnector [TI] as had been agreed in Schedule 13 of the PPA resulting in absence of a mechanism to evacuate electric power. As a result, LTWP would not have generated power since there was no mechanisms to evacuate the power thereby accruing Deemed Generated Energy (DGE) payments as had been indicated in the section 6.13 of the PPA and Government letter of support section 11.2 dated 28 February, 2013 File No. DMD 4/243.

3.3.60 During the consultative meeting held on 5 July, 2017, it was noted that LTWP had not installed the meter at metering point "A". There were to be two meters, metering point "A" and metering point "B". Power to the National grid was to be delivered via metering point "B". Metering point "A" was a request to be installed by KPLC for purposes of future evacuation of power from LTWP to Loinyagalani. Metering "A" is not in use since no connections has been done to it and therefore it cannot evacuate any power. However, Metering "A" was ready as notified through letter Ref No. KPLC /2017/10/001 dated on 23 October, 2017, this was further agreed through meeting held on 10 November, 2017. (Exhibit 40).

3.3.61 Schedules 1 and 6 of the PPA, required that a system known as "SCADA" to be installed to confirm quantity of power generated by the turbines at any one particular time. The power plant and the SCADA system for the power plant as at the commercial operation date of 27 January, 2017 was not recording wind speed and air density measurement required for DGE computation purposes. This was attributed to absence of the Transmission Interconnector (TI). (Exhibit 41).

3.3.62 In the absence of a Transmitter Interconnector (TI)-line connection, the SCADA System could not record the required measurements since there was no power available. Consequently, the second variation agreement of the PPA provided that DGE calculation shall be on the basis of SCADA system only when the Transmitter Interconnector (TI) is available. This was for the purpose of easing the GOK TI Delay DGE calculation since there was no TI connection. The turbines could not record data without power and there could not have been power without TI connection.

3.3.63 In the absence of the Transmission line (TI) which was a requirement under clause 11.5 of the PPA of 2010, it was difficult for LTWP to reliably invoice KPLC and therefore the commissioning dates were changed from 27 January, 2017 to 15 May, 2017 and all amount of Euro17.71M accrued during the period 27 January, 2017 to 15 May, 2017 was written off by LTWP.

3.3.64 It was also agreed that an amount of GOK TI Delay DGE payment owed to LTWP of Euro 81M (EURO 127.7 M less EURO 46 M paid in cash) on the GOK TI expected revised operation date of 31 May, 2018 shall be paid to LTWP as an additional tariff increment (Deemed Generated Energy Recovery period) over a period of 6 years through a pass-through cost mechanism ie it will have transferred to the consumer.

3.3.65 According to the GOK letter of support dated 28 February, 2013, LTWP was to notify KPLC in writing on a daily basis in relation to the DGE for the immediately preceding day and shall further provide KPLC with relevant data and supporting documentation, so that KPLC can audit and verify the calculation of GOK TI Delay DGE and TI Interruption DGE. The audit team noted that LTWP was notifying KPLC on a daily basis on the GOK TI delay DGE readings which was as per the GOK letter of support.

3.3.66 Pursuant to clause 6.6 of the PPA, LTWP confirmed to KPLC 6 March, 2019, as the full commercial operation date via unreferenced letter dated 4 March, 2019, and certificate of Independent Engineer, Mott Macdonald, which stated that the plant commercial operation date had been achieved on 19 February, 2019.The special audit team noted during the field verification that LTWP had installed the CT and VT Main Meter A of the power plant by 30 July, 2017, this was to allow for evacuation of power through the CT and VT transformers. The SCADA system for the power plant was functional by the commercial operations date of 24 September, 2018 for the Transmission Line when the plant was energized. (Exhibit 42)

3.3.67 According to a letter Ref No. OP/CAB.1/64A dated 1 August, 2017, from the Office of Chief of Staff and Head of the Public Service in the Executive Office of the President, the consultative meeting held on 5 July, 2017 agreed on the following deliverables:

Table 11: Agreed deliverables from the consultative meeting

	Action/Process required	Party responsible	Action required	Status as at time of audit
1	KPLC and LTWP to make the amendments required to the Power Purchase Agreement	KPLC and LTWP	KPLC board approval required. ERC regulatory approval required	Complete
2	Approval of the GOK payment to LTWP of Euro 46 Million-for payment of outstanding invoices and future invoices between 15 May, 2017 to 30 June, 2018	Treasury and MOEP	Approval payment required	GOK paid Kshs. 5,634,780,000 (Euro 46,000,000) before 31 August, 2017. These payments were to cover outstanding invoices and future invoices between 15 May, 2017 to 15 October, 2017;
3	KETRACO to provide a credible implementation plan to ensure that the transmission line is completed by the first half of 2018	KETRACO, MOEP, Treasury	MOEP and KETRACO to approve	Not completed until 24 September, 2018 which means the TI line delayed further by approximately 3 months.

(Exhibit 43)

3.4 Expenditure

GOK TI Delay DGE Payments Kshs.18,499,082,672.39 (Euro 167,261,145).

3.4.1 We established that a total of Kshs.18,499,082,672.39 (Euro 167,261,145) had accrued as DGE dues as follows:

Table 12: DGE Payments for the period 15 May, 2017-10 September, 2018

	Payment period	No of days	Euro	Rate	Kshs
1	15 May, 2017- 31 May, 2018	381	127,577,128	110.60	14,110,030,392

2	1 June, 2018-10 September, 2018	101	39,684,017	110.60	4,389,052,280
			167,261,145		18,499,082,672

DGE Payment of Kshs. 14,110,030,392 (Euro. 127,577,128)

3.4.2 KETRACO delayed in constructing the Transmission-Interconnector [TI] line as had been agreed in Schedule 13 of the PPA resulting in absence of a mechanism to evacuate electric power. The TI was to be finalized by the commissioning date of 27 January, 2017, however KETRACO completed the line on 24 September, 2018.

3.4.3 According to Clause 9.5 of the Power Purchase Agreement (PPA), amended, on 13 May, 2013, after the First Commercial Operation date of 27 January 2017, KPLC shall pay to LTWP in respect of each KWH of Deemed Generated Energy-DGE during a month, the amount (The Deemed Generated Energy payment) equal to the energy charges that would have been payable in respect of such DGE had it been delivered at either of the delivery points.

3.4.4 Clause 11.1 of the PPA required LTWP to install a metering system in the project to be used to measure total production units. However, the metering installed by LTWP could not read since the transmission line was delayed in completion and thus hot commissioning had not taken place. In the absence of the metering system, it was not possible to determine the DGE charges.

3.4.5 Schedule 6-part C of the third amendment of the PPA, dated 13 May, 2013 (Second variation dated 19 September, 2017) detailed the GOK TI Delay payment refund as follows:

GOK TI Delay DGE =Number of completed units' X (Number of days in the relevant month X24) X850 X 0.62 X Agreed rate

Where;

24-Hrs in a day;
850-Maximum Power Output (KW);
0.62 -The percentage of the average wind speed-agreed wind speed (10.5);

Agreed rate (Euros) - 0.07719, applicable for the period between 15 May 2017-31 May, 2018; (381 days)

3.4.6 Based on the second variation, clause 2 section 2.1.5, which deleted the entire clause 9.5.5 of the PPA in its entirety replaced it and acknowledgment that GOK shall on account of the GOK TI Delay DGE payments for the initial TI Delay DGE period pay LTWP a net lumpsum amount of forty-six million (Euro 46,000,000.00) (exclusive of VAT; in cleared funds; and without any set-off, deduction or counterclaim) on or before 31 August, 2017). The estimated DGE total amount owed to LTWP between 15 May, 2017 and 31 May, 2018(381 days) was Euro 127,577,128.

3.4.7 Out of the above DGE amount of Kshs. 14,110,030,392 (Euro. 127,577,128), GOK paid LTWP an amount of (Euro 46 Million) resulting in outstanding balance of EURO. 81,577,128. In a consultative meeting, held on of 5 July, 2017 on a practical arrangement that would accommodate GOK, LTWP and KPLC's constraints, the parties agreed as follows:

I. LTWP agreed to the start date of GOK TI Delay DGE Payments to be 15 May, 2017 instead of 27 January, 2017 (i.e. LTWP gave the GOK the above discount of Euro 17.72 Million);

II. With respect to GOK TI Delay DGE for the period 15 May 2017 to 31 May, 2018 ("Initial TI Delay DGE Period"), GOK agreed to pay LTWP a lumpsum of Euro 46,000,000 (Euro Forty-Six Million) before 31 August 2017;

III. To compensate for the difference between the lumpsum payment of EURO 46,000,000 and the Actual GOK Initial TI Delay DGE for the period from 15 May, 2017 to 31 May, 2018 (i.e. Euro 127.58 million), Euro 81,577,128 was deferred and LTWP was to receive a tariff increase of EURO 0.00845 per kWh ("DGE Recovery Period Tariff"), which was to be paid by KPLC / GOK during the period from 1 June 2018 to 31 May, 2024 ("DGE Recovery Period"); and

IV. Any TI Delay beyond 01 June, 2018 would result in LTWP being paid GOK TI Delay DGE.

DGE payments of Kshs. 4,389,052,280 (Euro 39,684,017)

3.4.8 The Transmission Interconnector (TI) line was not completed by 31 May 2018, and therefore from 01 June 2018 until the TI Operation Date which occurred on 24 September, 2018, the following was the amounts invoiced, paid and outstanding.

Table 13: DGE Payments for the period 1 June, 2018 to 10 September, 2018

GOK TI Delay DGE Invoice Number	GOK TI Delay DGE Period	Amount Invoiced excl. VAT(Euro)	Amount Received (Euro)	Balance Outstanding (Euro)	Agreed Balance Payable (Euro)
100010	Jun-18	11,784,768	9,865,635	1,919,133	1,919,133
100011	July-18	12,177,593	12,085,391	92,202	92,202
100012	August-18	12,177,593	7,754,388	4,423,206	4,423,206
100013	1 September -23 September 18	9,057,049	0	9,057,049 Write-off (5,512,986.00)	3,544,063
	Total	45,197,003	29,705,414	15,491,589	9,978,603

3.4.9 LTWP agreed to write-off a further Kshs. 609,736,251 (Euro 5,512,986) (for the period 11 - 23 September, 2018). According to letter ref. No. KP1/3C/2/15/510/TK/EP&RA/jtn dated 28 May, 2019, the outstanding balance owed to LTWP was Euro 9,978,603 was equivalent to Kshs.1.16 billion was provided for in the Second Supplementary Estimates for FY 2018/19 and paid to LTWP in August, 2019. (Exhibit 44)

Table 14: Summary of DGE Payments, write-offs and discount

GOK TI Delay DGE Period	Amount Invoiced / Due excl. VAT(Euro)	Amount Paid / Received (Euro)	Discount / Written Off by LTWP (Euro)
27 January, 2017 to 14 May, 2017	17,722,013	NIL	17,722,013
15 May 2017 to 31 May 2018 (Initial TI Delay DGE Period)	46,000,000	46,000,000	0
Jun-18	11,784,768	11,784,768	0
July-18	12,177,593	12,177,593	0
August-18	12,177,593	12,177,593	0
1 September -23 September 18	9,057,049	3,544,081	5,512,968
Total	108,919,016	85,684,035	23,234,981

3.4.10 A total of Kshs. 10,262,786,413.3 (EURO. 85,684,035) had been paid to LTWP by GOK (MOE) via KPLC), while EURO 81,577,128 was deferred and LTWP was to receive a tariff increase of Euro 0.00845 per kWh ("DGE Recovery Period Tariff"), which was to be paid by KPLC from the period from 1 June, 2018 to 31 May, 2024 ("DGE Recovery Period of 6 years") and Euro 23,234,981.00 was written-off by LTWP for the periods: 27 Jan, 2017 - 14 May, 2017 and 11 Sept, 2018 - 24 Sept, 2018.

VAT Claims by LTWP of Kshs. 2,785,429,737

3.4.11 Clause 9.6 and schedule 9 of the PPA requires that , "if there is a change in tax ,either party may within 6months of the change occurring by notice to the other, seek an adjustment to the energy charges which will have the effect of placing LTWP in the same financial position as it would have been in had the change not occurred," The clause further *states that, " if KPLC will not be in a position to pay LTWP in relation to additional charges, LTWP shall be entitled to demand for and receive payments from the GOK pursuant to the GOK Guarantee that such payment would have the effect of placing LTWP in the same financial position as it would have been had the change in tax not occurred".*

3.4.12 Section 8 (1-3) of the VAT Act 2010, schedule 5, on zero rated goods, part B (special goods No.17- Equipment for Electric Power Generation) states that, *"Capital equipment, excluding motor vehicles, spare parts and office equipment, for privately financed power generation projects with capacity to sell electricity into the national grid, are zero rated subject to a written approval by the Permanent Secretary to the Treasury,"* further, VAT Act 2010 was specific to wind generating sets. (Exhibit 45)

3.4.13 According to a letter REF No. MOE&P/CONF/2/1/1 dated 22 October, 2014, the Cabinet Secretary to the Ministry of Energy wrote to the Cabinet Secretary National Treasury proposing government to pay import duties and VAT relating to the project on behalf of LTWP limited. The Cabinet Secretary, Ministry of Energy therefore welcomed the assurance from the National Treasury that import duties and VAT relating to the project will not be levied against LTWP. The principal secretary MOE, in a letter to Treasury further indicated that levying of import duties and VAT to LTWP will be counterproductive and will lead to reopening of the PPA resulting to an increase in the cost of power to the Kenyan consumer, contrary to the aspirations to lower the cost of power. (Exhibit 46)

3.4.14 On 23 October, 2014, the Cabinet Secretary, National Treasury responded to the Ministry of Energy & Petroleum vide Letter ref DFN/415/232/011 confirming that the taxes due on the aspect of the project that are not covered by law will be paid by the government as a contribution to the project with a condition that the contribution will be factored in the determination of the tariff in order to make energy affordable to the consumers. (Exhibit 47)

3.4.15 The special audit team noted that Mr. Wanyambura K Mwambia on behalf of the PS National Treasury wrote to the Principal secretary MOE vide a letter ref No. DFN 415/232/011 dated 19 September, 2014, on items exempted from duty and VAT in regards to LTWP. Subsequently, the Cabinet Secretary, National Treasury wrote to the chairman LTWP limited vide a letter Ref: No. ME/CONF/2/1/1 dated 24 October, 2014 stating that the National Treasury has confirmed that the taxes due on those aspects of the project that are not covered by law will be paid by the Government as a contribution towards the project and that this contribution will be factored in the determination of the tariff in order to make energy affordable to the consumers and to ensure the tariff is not adjusted upwards. The letter states that all invoices issued by KRA of such taxes should therefore be submitted to the Ministry of Energy and Petroleum for settlement. (Exhibit 48).

3.4.16 We established that a total of Kshs. 2,785,429,737 was the VAT payable by LTWP for the period the project was under construction by LTWP and KETRACO. Out of these amounts, Kshs. 1,053,084,283 was paid to LTWP as tax refund while Kshs. 46,466,018 was paid to KRA by Ministry of Energy on behalf of LTWP leaving an outstanding VAT claim of Kshs. 1,685,879,435 summarized in the table below (Exhibit 49) :

Table 15: Taxes paid to KRA and Contribution from GOK Towards the project.

Voucher	Voucher date	Payee	Payment Date	Amount (Kshs)	Remarks
2965	29/6/2017	Lake Turkana Wind Power Limited	6/30/2017	116,553,360	Provided as a supplementary budget approved inter office memo 22 June, 2017 and Letter Ref. DFN 415/232/001 dated 29 June, 2017
2123	27/9/2016	Lake Turkana Wind Power Limited	9/21/2016	102,882,053	No approval documents provided

2746	28/6/2017	Lake Turkana Wind Power Limited	30/6/2017	833,648,870	Provided as a supplementary budget approved inter office memo 22 June, 2017 and Letter Ref. DFN 415/232/001 dated 29 June, 2017
	Amount Paid to LTWP as GOK Contribution			**1,053,084,283.**	
127		Kenya Revenue Authority VAT	9/21/2016	46,466,018.	Paid to KRA in the name of tax refund to LTWP
		VAT Claim by LTWP		1,685,879,435	Amount LTWP is claiming to be refunded by MOE
		Total VAT Claim		**2,785,429,737**	

3.4.17 The special audit further established that an additional Kshs. 1,685,879,435 remains outstanding as VAT claimable from the Government by LTWP. It is noted that on 28 June, 2017, KRA Commissioner of Domestic Taxes Department, Mr. Benson Korongo wrote to Mr. Wanyambura K Mwambia of the National Treasury and noted that KRA had subsequently done an audit on the affected supplies to the project and established that the amounts as set out by the supplier, Vesta E.A LTD, Pin No. P051173829X of Kshs. 1,896,291,031 in VAT was declared and remitted to KRA and therefore recommended for refund of the same to LTWP. However, according to LTWP records, a total of Kshs. 200,000,000 had been refunded leaving an outstanding balance of Kshs. 1,685,879,435. (Exhibit 50).

3.5 Construction of Transmission Line.

3.5.1 Clause 2.4 of the Power Purchase Agreement (PPA of 2010 recognized that Transco Ltd which is a subsidiary of LTWP was to develop the Transmission Interconnector (TI) line. According to clause 1.1 of the PPA, Transco Ltd is a company affiliated to LTWP defined as, "Transco" which means Lake Turkana wind Power Transmission Company Limited." Transco Ltd was to Finance, Construct, Operate and Maintain the Transmission Interconnector as was approved through the Cabinet Memorandum of implementation under PPP letter Ref No.ME/CONF/3/2/73A dated 3 June, 2009. This is a Built Own Operate Transfer (BOOT) type of a Public Private Partnership (PPP) arrangement guided by section 3(d) of the Public Procurement and Disposal (PPP) Regulation 2009.

3.5.2 The special audit team noted that initially the transmission line was to be constructed by the Transco which is a private developer, however through letter Ref No.conf.193/01 "TY", the PS, National Treasury had reservation on the impact of the transmission line being developed by the private developer and the effect it will have on the electricity tariff. GOK changed its mind and confirmed through a letter Ref No.ME/CONF/3/2/8 dated 30 January, 2010 to undertake the construction of the transmission line with the support from the kingdom of Spain through M/S Isolux Ingeniers SA, an Engineering Procurement Construction (EPC) contractor. This was because GOK wanted to own the transmission line (Exhibit 51).

3.5.3 The construction of the line was to be done through a concessionary loan funding from the government of Spain and the CESCE backed commercial banks including Deutche Bank government who financed the project at an amount of Kshs. 12,166,000,000 (Euro 110,000,000) out of the Kshs. 15,152,200,000 (Euro 137,000,000). The balance of which kshs.3,543,419,611 (Euro 32,038,152) was to be financed by GOK.

3.5.4 The construction of the transmission line was being funded as follows (Exhibit 52):

Table 16: Financiers of the Transmission line

	Contract signed	Contract Date	Amount Euros	Amount(Kshs)
1	Loan agreement between Instituto credito official of the Kingdom of Spain and Ministry of Finance of the Republic of Kenya	30 March, 2012	55,000,000	6,083,000,000
2	Deutsche Bank	29 April, 2013	55,000,000	6,083,000,000
3	GOK contribution	-	32,038,152	3,543,419,611
	Total			**15,709,419,611**

Exchange rate 1 Euro =110.6 KES

3.5.5 LTWP had invited tenders on behalf of KPLC in accordance with the agreement of the Special Task Force that had been established between the two parties to facilitate this process (Exhibit 53).

3.5.6 Pursuant to the Power Purchase Agreement (PPA) of 29 January, 2010, LTWP was given the mandate to deliver the plant and the transmission line. However, at this time

KETRACO was already in existence since it had been formed on 2 December, 2008. According to KETRACO, they were not actively involved in the procurement process of the contractor for the transmission line (M/s. Isolux Ingenieria SA) since they were still a new agency.

3.5.7 The transmission project had been split into three contract lots as indicated in table below. Lots 1 and 2 were to be done by Lake Turkana Wind Power Ltd while Lot3 was to be done by a different company but affiliated to Lake Turkana Wind Power Ltd.

Table 17: Three contract lots for the transmission line

S/no	Lot	Description	Contractor
1	Lot 1	Electrical infrastructure at the LTWP Wind Farm, consisting of the Wind Farm, 33Kv grid and the collection busbar at Loiyangalani.	LTWP Ltd
2	Lot 2	400/33Kv substation Loiyangalani, 400/220Kv Sub-station Suswa including installation of SCADA system.	LTWP Ltd
3	Lot 3	400Kv Transmission Line from Loiyangalani to Suswa, 220 kv tie at Suswa.	M/s. Isolux Ingenieria SA and eventually completed by The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd

3.5.8 The scope of this special audit is however limited to LOT 3-Construction of Transmission Line as requested by the Principal Secretary, Ministry of Energy. Completion of Lot 3 was delayed resulting in DGE payments and therefore triggering this special audit.

3.5.9 We established that the tender package was compiled by KEMA Consultants and reviewed by the KPLC, KETRACO and LTWP Task Force. According to the report by KEMA consultants, the tendering was executed according to the second edition of FIDIC Tendering Procedure of 1994. The final approval by KPLC, KETRACO and MOE to issue the tenders was given in the Task Force Meeting no. 9 of 3 July, 2009.

3.5.10 Section 16. (1) of the Public Procurement and Disposal (Public Private Partnership) Regulations, 2009 requires that as soon as the procurement entity identifies a project that may be concluded as a Public Private Partnership, the procurement entity shall, in writing, invite for prequalification or proposals from potential bidders through at least two newspapers with a national circulation and the same shall be posted on its website, if any. We established through review of the tender technical evaluation report of 6 January, 2010, that Lake Turkana Wind Power (LTWP) invited tenders for construction of 400Kv transmission line from Loiyangalani to suswa, 220 kv at Suswa on behalf of KPLC. There was no explanation as to why LTWP invited tenders on behalf of KPLC (Exhibit 54)

3.5.11 Prequalification of bids was conducted by the following firms: Lake Turkana Wind Power (LTWP), Klynveld Peat Marwick Goerdeler (KPMG) and Keuring van Elektrotechnische Materialen te Arnhem (KEMA) of the Netherlands resulting into seven prequalified bidders for the tender for construction of 400Kv transmission line from Nyongalani to suswa,220 KV tie at Suswa. The seven prequalified bidders were as follows; M/S Cobra/Chidhiya, M/S Elecnor, M/S Isolux, M/S Iyoti, M/S Kalpatsara, M/S KEC Transrail and Gammon. Section 20. (1) of the Public Procurement and Disposal (Public Private Partnership) Regulations, 2009 requires evaluation of Public Private Partnership bids to be carried out by the procurement entity (KPLC and KETRACO). In this case, technical evaluations were conducted by private entities and not the procuring entity without an explanation as to why KPLC and KETRACO did not conduct the evaluations themselves pursuant to Section 20 (1) of the Public Procurement and Disposal (Public Private Partnership) Regulations, 2009.

3.5.12 The seven prequalified companies were invited to bid with closing dates of the tender set on 19 October, 2009. Five companies out of the seven, responded to the bid and were evaluated as follows:

Table 18: Lot 3 final technical financial scores

LOT3 Final technical financial	Elecnor (Euro)	Kalpataru (Euro)	KEC International (Euro)	Isolux Corsan (Euro)	Gammon India Ltd (Euro)
Lumpsum excluding maintenance	159,305,477	145,005,999	145,624,096	136,970,018	143,912,751
TECHNICAL SCORE	**75.6%**	**60.8%**	**68.0%**	**56.9%**	**70.6%**
Monetary value of technical deviation	35,663,935.00	57,296,158.00	46,772,374.00	62,996,541.00	42,972,119.00
NPV maintenance	15,923,791.00	15,100,767.00	-	10,747,432.00	16,084,977.00
NPV spares	128,200.00	-	14,33,187.00	-	-

LOT3 Final technical financial	Elecnor (Euro)	Kalpataru (Euro)	KEC International (Euro)	Isolux Corsan (Euro)	Gammon India Ltd (Euro)
TOTAL FINAL TECHNICAL FINANCIAL SCORE	211,021,404	217,402,924	206,729,658	210,713,991.00	202,969,847

3.5.13 The opening of the above bids was done at KPMG in the presence of LTWP, KPLC, KETRACO and KEMA who Coordinated the tendering process and issued invitation bid. The monetary value and technical deviation summary as done by KPMG indicated that the average tender price was Kshs.16,165,701,127 (Euro 146,163,668) and noted that the prices for all bidders were to be corrected. It was noted that, LTWP will determine the final ranking of the firms considering the financial offer/conditions and financing solution.

3.5.14 According to the KETRACO board minutes dated 29 July, 2011, the KETRACO board agreed and approved negotiation of the Transmission Interconnector through which energy from the LTWP would be transmitted and mandated KETRACO to develop the line. KETRACO was therefore, given the mandate to construct or subcontract the services of building the Interconnector transmission line which was awarded to M/s Isolux Ingeniers SA. However, there was no evidence that KETRACO conducted any technical or financial due diligence including insolvency / bankruptcy risk assessment on the company to confirm its technical and financial ability to deliver the contract before contracting it contrary to Section 31 of the Public Procurement and Disposal Act 2005. Instead, they relied on evaluations conducted by LTWP, a private entity. (Exhibit 55)

3.5.15 We noted that M/S Isolux Ingeniers SA had quoted an amount of Euros 136,970,018 during bidding yet the contract was entered at Euros 142,039,152.00 being EURO 5,069,134 (Kshs. 506,913,400) above the bid price quoted by M/S Isolux Ingeniers SA without explanation. This was contrary to section 68 (1) of the Public Procurement and Disposal Act, 2005 that requires that the person submitting successful tender and the procuring entity shall enter into contract based on the tender document. (Exhibit 56).

3.5.16 The final notice to proceed with contract was issued by KETRACO vide letter KET/CS/2/14G/5/DM/bnk dated 13 August, 2014 addressed to M/S Isolux Ingeniers SA.

KETRACO signed a contract on 30 December, 2011 with M/S Isolux Ingenieria at cost of Kshs. 16,934,872,132.00 (Euros 142,039,152). This contract was signed for a period of 24 Months from the date of the final notice to proceed (Exhibit 57).

3.5.17 We noted that KETRACO issued consultancy services contract to KEMA for professional skills, personnel and technical resources on 31 August, 2016.The task of the consultant were:

a) Management and coordination of the Engineering Procuring and Construction (EPC) contracts on behalf of the client KETRACO;
b) Informing the client on the progress and quality of the works on a regular and timely basis; and
c) Coordination between the EPC contractors and the client the interfaces and task of KETRACO

3.5.18 The special audit team noted that despite KETRACO issuing contract for consultancy services to KEMA for the purpose of evaluating the performance of the contractor, the contractor M/S Isolux Ingeniers was still unable to complete the construction of the transmission line in time. (Exhibit 58)

3.5.19 The special audit noted that M/S Isolux Ingeniers SA contract was varied through various addendums as follows: (Exhibits 59 & 60)

Table 19: Lot 3 Contract addendums

Particulars	Details
1st Addendum	Dated 2 August, 2013 to amend clause 8.1(c) on full notice to proceed with the EPC contract after the contract from 18 months to 24 months period within which either party may by written notice to other party may terminate the contract, validity period was extended to 30th December 2013
2nd Addendum	Signed on 26 February, 2014 with the following changes: • Clause 8.1(c) and all associated reference in the EPC contract and Addendum 1 agreement were amended, in relation to Full notice to proceed issuance in reference to 18 months after the contract date amended to 30 months after contract terms and conditions of the EPC contract as amended in this Addendum 2 were valid until 30th June 2014

Particulars	Details
	• The parties agreed in relation to the full notice to proceed as defined within the contract. The contractor will consider the full notice to proceed as dully issued once the employer has agreed with its obligation in particular regard to the advance payment as agreed within the contract • Clause 14.1(c) shall not apply and the contract price shall remain fixed.
3rd Addendum	Contract price varied on 22 July, 2016 from the initial Kshs. 16,934,872,132 (EUR142,039,152) to Kshs.17,327,406,719 (EUR145,303,201). This was a difference of Kshs.389,357,093 (EUR3,265,049).
4TH Addendum	Dated 31 October, 2016, the scope of the contract was varied and contract price increased by Ksh.81,930,593.25(EUR687,076) to Kshs. 17,406,159,818 (EUR145,990,277) This contract was later extended on 16 November, 2016 to 31 December, 2017 to allow for completion of the Transmission Line.

3.5.20 The initial scope involved Engineering, Procurement and Construction contract for design, manufacture, test delivery, installation, completion and commissioning of construction of a double circuit 400-kilovolt transmission line. However, as per the third addendum signed on 22 July, 2016,the scope was varied in the southern part of the line by re-aligning the line vide change request CR-KET-ST-033-2014-01 and corresponding change order No.CO-KET-ST-033-2014-01 of value Euros 3,265,049 issued to the contractor , MS Isolux Ingenieria S.A on 7th April 2016.

3.5.21 The consideration was change of original contract price from Euros 142,039,152 to Euros 145,303,201. This was signed by the KETRACO Managing Director and Company Secretary and M/s Isolux Ingenieria S.A side represented by Managing Director Africa and Project Director. This again pushed the contract completion period by two and half months to 30 December, 2016, which was contrary to section 31(d) of the Public Procurement & Disposal Regulations, 2006 which requires that the price or quantity variation is to be executed within the period of the contract. There was also no evidence that this variation amounting to EURO 149,255,326 of the contract price were approved by the project financiers to confirm availability of funds contrary to section 47 (a) of the PPDA of 2005.

3.5.22 It was established that M/s Isolux Ingenieria SA filed bankruptcy proceedings through the courts of the mercantile 44357 Madrid on 14 July, 2017. This was after the agreed completion date for construction of the Transmission Interconnector (TI) line had lapsed on 30 December, 2016.This contract was later extended on 16 November, 2016 to 31 December, 2017 to allow for TI completion. This therefore, indicates that M/S Isolux Ingenieria SA was behind schedule to complete the Transmission line. (Exhibit 61)

3.5.23 There was no evidence that KETRACO conducted any technical or financial due diligence including insolvency / bankruptcy risk assessment on the company to confirm its technical and financial ability to deliver the contract before contracting it contrary to Section 31 of the Public Procurement & Disposal Act 2005. Instead, they relied on evaluations conducted by LTWP, a private entity.

3.5.24 The Attorney- General in a letter Ref: AG/CONF/21/8/88 VOL.1(24) dated 3 August, 2017 addressed to the Cabinet Secretary, Ministry of Energy concluded that despite KETRACO having knowledge that M/s Isolux Ingeniers SA had financial challenges, it continued to engage with it to the extent of varying works, price and the completion period. (Exhibit 62)

3.5.25 It was noted that KETRACO on 14 August, 2017, through a letter Ref KET/CS/S/5/1/DM/amk wrote to DEUTSCHE BANK, S.A.E, the project financier, informing them of their intent to terminate the commercial agreement on account of default by the contractor to meet set timelines. The letter further indicated that MS Isolux Ingeneria, S.A had filed a petition for bankruptcy and was in breach of contract contemplated in the provisions of the clause 15.2(h) of the commercial agreement. The letter was received and acknowledged by DEUTSCHE BANK, S.A.E via email dated 23 August, 2017. (Exhibit 63)

3.5.26 M/s Isolux Ingeneria, S.A filed a Civil Case No.345 of 2017 in High Court of Kenya challenging the termination of the contract by KETRACO. The case was determined, and a ruling made on 19 December, 2017 by judge J.L. Onguto. The court dismissed their case in favor of KETRACO.

3.5.27 On 14 August, 2017, KETRACO invoked, clause 15.2(h) of the of the PPA and terminated the contract with immediate effect, recalled the performance security and issued a notice to Kenya Commercial Bank immediately. Clause 15.2(h) of the termination notice states, that "Accordingly, the employer hereby gives notice terminating the contract in accordance with the said clause with immediate effect".

3.5.28 Clause 16.2 of the PPA gives grounds for termination to include failure by MS Isolux Ingeneria, S.A or parent Company to meet its obligations". According to section 8.2 of the Civil Case No.345 of 2017, the guarantee of sums EURO 14,200,000 was recalled on 14 August, 2017 from KCB Bank Limited and Commercial bank of Africa who were 3rd and 6th Defendants in the case. The money was held in the defendants account No.1111251622 at KCB Bank Limited Moi Avenue. (Exhibit 64)

3.5.29 As at the time of termination of the contract, out of the varied contract sum of Kshs.18,920,339,899 (EUR145,990,227), KETRACO confirmed that a total of Kshs.10,827,050,072 (EUR83,542,053) had been paid to M/s. Isolux Ingeniers SA.

Table 20: Contract amounts, and the various addendum

	Particulars	CRY	Amount
1	Initial contract sum with M/s. Isolux Ingenieria SA	EUR	142,038,152
2	First contract variation with M/s. Isolux Ingenieria SA	EUR	3,265,049
3	Second contract variation with M/s. Isolux Ingenieria SA	EUR	687,076
4	Final contract sum with M/s. Isolux Ingenieria SA	EUR	145,990,277
5	Final contract sum with M/s. Isolux Ingenieria SA	KSHS	18,920,339,899
6	Amounts paid to M/s. Isolux Ingenieria SA as at date of Contract termination	EUR	(83,542,053)
7	Amounts paid to M/s. Isolux Ingenieria SA as at date of Contract termination (EUR=KSHS129.6)	KSHS	10,827,050,072
8	Amounts paid to The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd		9,510,758,935
9	Amounts owed to The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd		1,786,853,615

10	Contract sum for sub-contractors		1,524,059,296
11	Payment to sub-contractors to release material at the yard		26,880,329
12	Amount recovered through performance bond		(1,576,200,000)
13	Total amounts paid plus owed as at completion		22,099,402,247
	Extra cost incurred to finalize the transmission line		3,179,062,348

3.5.30 The special audit noted that as at the time of termination of the contract agreement, there were materials on site in the custody of sub-contractors at a yard belonging to M/s. Spedag Clearing and Forwarding Agent. These materials were released to KETRACO after payment of Kshs. 26,880,329 (EUR243,040). This payment was deducted from amounts owed to M/s. Isolux Ingeniers SA.

3.5.31 According to clause 4.4 of the signed contract, M/s Isolux Ingeniers SA had procured the services of subcontractors. Clause 4.5 of the contract, on the transfer of subcontractor to employer, requires that upon notification to the subcontractor from employer, that the contract has been terminated, and the employer or a designee thereof will thereafter be assuming contractors future obligation under such subcontractor, then the contractor and subcontractor shall execute a deed of novation in substantially the form set forth in schedule 3 in favor of employee or its designee and the sub-contracted shall continue to perform its responsibilities under such subcontractor for the benefit of employer or such designee and shall maintain all rights and claims against each subcontractor for the portion of work previously performed.

3.5.32 After terminating the contract with M/s Isolux Ingenieria SA contract, KETRACO procured The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd to complete the construction of the Transmission Interconnector (TI) lines. The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd was awarded the second contract on 30 January, 2018, to complete the procurement, construction, testing and commissioning of approximately 428 Km of 400Kv transmission line between Loinyangalani and Suswa substations.

3.5.33 Section 92 (1) of the PPDA, 2005 provides that the Authority may permit use of specially permitted procurement procedures in procuring concessioning projects. "concessioning" means a procurement that encourages mobilization of private sector resources for the purpose of public financing, construction, operation and maintenance of development projects and may include builddown and operate, build-own-operate and transfer, build-operate and transfer or similar types of procurement procedures.

3.5.34 Section 92 (4) of the PPDA, 2005, further provides that, in specially permitting a procedure under subsection (1) above, the Authority may exempt the procedure from the application of a provision of Part IV (General procurement procedures) or vary the application of such a provision.

3.5.35 The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd was procured through a specially permitted procurement procedure which was approved by the Dr. Kamau Thugge, then PS at the National Treasury on 10 January, 2018 vide a letter Ref MOF/PPD/2/20/30(12). (Exhibit 65).

3.5.36 According to the special permitted bid evaluation report dated 15 January, 2018, KETRACO took a market survey by issuing draft bid documents to 5 contractors who are already mobilized and currently on site working for KETRACO. These companies were; M/s Kalpatura Power Transmission limited, The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd, M/s Larsen and Toubro, M/s Consolidated Power Project Group Africa and M/s KEC International Ltd. Out of the 5, The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd was noted to be most responsive and was recommended for the award. (Exhibit 66)

3.5.37 The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd was sent a letter of intent to award the tender Ref: ket/fea/SL/1/2/PM dated 26 January, 2018, and accepted the award on 29 January, 2018 vide a letter Ref: NARI-PCGE/KET/LSTP/1801-001. It was awarded the second contract on 30 January, 2018 was to complete the procurement, construction, testing and commissioning of approximately 428 Km of 400Kv transmission line between Loinyangalani and Suswa substations. (Exhibit 67)

3.5.38 The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd completed the transmission line on 10 September, 2018, according to the takeover Certificates Number TOC/LS/SS No.2 and TOC-LSTL No.1 and letter issued by KETRACO from Eng.Jared Othieno to Lars Olesen General manager dated 19 September, 2018 Reference number KET/4/14G/35/Vol.7/43/JS/rnk. (Exhibit 68).

3.5.39 As at the time of audit, it was noted that The Consortium of NARI Group Corporation and POWERCHINA GUIZHOU Engineering Co. Ltd, were contracted on 30 January, 2018, and they completed the transmission line in less than 8 months, on 10 September, 2018, and a total Kshs.9,510,758,935 had been paid to The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd, leaving an outstanding balance of Kshs. 1,786,853,615 plus any accrued penalties thereof. The Consortium of NARI Group Corporation & POWERCHINA GUIZHOU Engineering Co. Ltd are still owed this amount of Kshs. 1,786,853,615, plus any accrued penalties thereof, which the special audit recommends settlement of this pending bill by the Government of Kenya to avoid incurring any potential liability attributed to delayed payments.

3.5.40 The special audit also established that KETRACO had engaged ten subcontractors picked from the sub-contracted by M/s. Isolux Ingenieria SA. This was pursuant to Clause 4.5 of the contract between KETRACO and M/s. Isolux Ingeniers SA, that provided for transfer of subcontractor to KETRACO in the event of termination of contract between KETRACO and M/s, Isolux Ingenieria SA.

3.5.41 The special audit noted that KETRACO, through the Technical Committee continued to engage with the subcontractors who had been undertaking foundation works to complete all the remaining foundations works at a total cost of Kshs. 1,524,059,296.

Table 21: List of subcontractors after M/s. Isolux Ingenieria SA termination contract

SUB CONTRACTORS	Amount Paid (Kshs.)
Seokang	47,420,229.83
Tamani 1	166,688,271.41
Tamani 2	244,675,293.97
Vanqo 1	137,615,538.79
Vanqo 2	64,894,141.16
Vanqo 3	50,287,193.64
Afrikon	67,082,477.78
Egmf 1	335,751,809.92
Egmf 2	71,015,772.65
Elemech 1	82,933,964.75
Elemech 2	13,414,141.05
Elemech 3	11,115,003.65
Global 1	8,554,653.14
Global 2	7,262,024.70
Burhani 1	13,859,551.47
Burhani 2	15,010,590.86
Burhani 3	9,749,643.87

Zeko 1	31,769,436.04
Zeko 2	14,052,161.63
Sub-total	**1,393,151,900.31**
NITL 1	23,091,779.92
NITL 2	50,242,259.89
NITL 3	26,185,380.29
RIGE	31,387,976.00
Sub-total	**130,907,396.10**
Total	**1,524,059,296.41**

3.5.42 Therefore, because of termination of the contract agreement between KETRACO and M/s. Isolux Ingenieria SA, a total of Kshs. 11,061,698,560 was incurred to complete the work that had been left by M/s. Isolux Ingenieria SA. It therefore implies that the termination of the contract agreement between M/s. Isolux Ingenieria SA and KETRACO resulted in an additional cost of Kshs. 3,179,062,348 to finalize the construction of the transmission line, thus, a 17 percent variament over the original cost, which was within the threshold of 25 percent as per the Public Procurement Laws.

4 APPENDICES

CONTACTS

Office of the Auditor-General

Address: P.O. Box 30084-00100, NAIROBI.
Telephone: +254 796 52 85 60
E-mail: info@oagkenya.go.ke

Website: www.oagkenya.go.ke

@OAG_Kenya   Office of the Auditor-General Kenya