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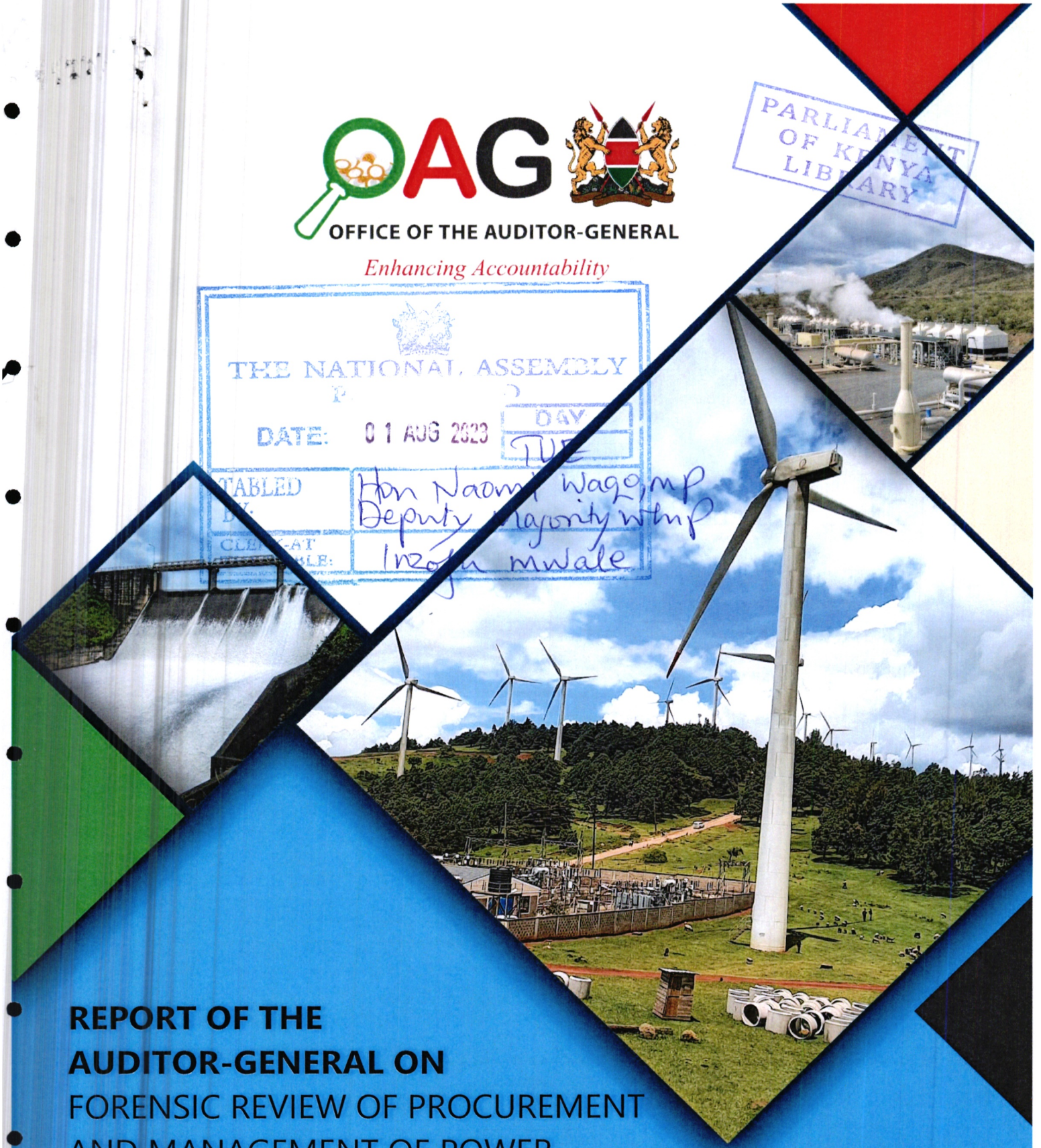

REPORT OF THE AUDITOR-GENERAL ON

FORENSIC REVIEW OF PROCUREMENT AND MANAGEMENT OF POWER PURCHASE AGREEMENTS

KENYA POWER AND LIGHTING COMPANY PLC

29 June 2023

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Abbreviations

Abbreviation	Detail
Biojoule	Biojoule Limited
BO	Beneficiary Owners
Cedate	Cedate Limited
Chania	Chania Power Company Limited
CP	Conditions Precedent
EoI	Expression of Interest
ERB	Energy Regulatory Board
ERC	Energy Regulatory Commission
EPRA	Energy and Petroleum Regulatory Authority
FiT	Feed in Tariff
Gulf	Gulf Power Limited
GOK	Government of Kenya
Gura	Gura Power Company Limited
HPSP	Hydro Project Service Peters Limited
Iberafrica	Iberafrica Power (EA) Limited
Imenti	Imenti Tea Factory Company Limited
IPPs	Independent Power Producers
KenGen	Kenya Electricity Generating Company
Kipeto	Kipeto Energy Limited
KPLC	Kenya Power and Lighting Company PLC
LCPDP	Least Cost Power Development Plan
LOS	Letters of Support
LWTP	Lake Turkana Wind Power Ltd
Malindi	Malindi Solar Group Limited

Abbreviation	Detail
MEP	Mott Ewbank Precee
Metumi	Metumi Power Company Limited
MOE	Ministry of Energy
NT	National Treasury
OAG	Office of the Auditor General
OrPower	OrPower 4 Inc
PPOA	Public Procurement Regulatory Authority
PPA	Power Purchase Agreements
PRG	Partial Risk Guarantee
PS	Permanent Secretary
PTSL	Power Technology Solutions Limited
Rabai	Rabai Power Limited
Regen-Terem	Regen-Terem SHPP Limited
Selenkei	Selenkei Investments Limited
SU	Strathmore University
Thika	Thika Power Limited
Triumph	Triumph Power Generating Company Limited

1. Executive Summary

1.1 Introduction

1.1.1 His Excellency the President through a Special Gazette Notice No. 3076 published on 29 March, 2021 appointed a Taskforce to undertake a comprehensive review and analysis of all Power Purchase Agreements (PPAs) entered into between Kenya Power and Lighting Company PLC ("KPLC") and Independent Power Producers ("IPPs").

1.1.2 The aim of the Taskforce was to develop a suitable strategy for engagement with the Independent Power Producers and lenders, in order to achieve relief to electricity consumers and ensure long-term viability and sustainability of the energy sector.

1.1.3 The Taskforce concluded its work and submitted a report to His Excellency the President on 29 September, 2021. The report contained nine (9) key recommendations, among them, the need to undertake a forensic audit review on how existing power purchase agreements (PPAs) were entered into and how they are monitored.

1.1.4 The Kenya Power and Lighting Company (KPLC) purchases bulk electric power from different Generators, which include Kenya Electricity Generating Company PLC (KenGen), Independent Power Producers (IPPs), and neighbouring countries (Uganda, Tanzania, and Ethiopia). The power purchased from these generators is made through various Power Purchase Agreements (PPAs).

1.1.5 The Management of KPLC through the Principal Secretary, Ministry of Energy requested the Auditor-General to conduct a forensic audit to review and identify weaknesses and malpractices during procurement of Power Purchasing Agreements (PPAs) with Independent Power Producers in line with the recommendations and Terms of Reference defined on the Taskforce.

1.1.6 The Forensic audit review was conducted by Deloitte & Touché LLP ("Deloitte") on behalf of the Auditor-General. Twenty (20) independent power producers were reviewed to establish if procurement processes, and contracting procedures followed by KPLC Management were in accordance with the applicable Laws and regulations in force at the time of each procurement and whether tariffs applied were in conformity with relevant laws and policies and tender documents.

1.2 Terms of Reference

1.2.1 The Terms of Reference for the forensic audit review as set out by the Taskforce were as follows:

i. Review of procurement options, processes and contracting procedures followed by KPLC Management in order to determine whether the PPAs were procured in accordance with the applicable laws in force at the time of each procurement.

ii. Review compliance of PPAs with Bid and Tender requirements including bonds and guarantees requested, if any.

iii. Establish the selection criteria used to identify the eventual IPP in each instance.

iv. Ascertain the capacity discharged by various plants against respective PPAs in the last 5 years.

v. Review the accuracy of the financial models applied.

vi. Review the tariffs applied and their conformity with tender documents and relevant laws and policies.

vii. Establish the contractors and subcontractors that supported developers and sponsors for each PPA.

viii. Establish the beneficial owners of the respective power plants.

ix. Carry out an analysis of IPPs' audited accounts for at least the last 5 years to ascertain whether the key parameters are in line with the audited financial models provided for in the PPAs.

x. Perform a comparative analysis of procurement costs of energy from the IPP plants, and against KenGen together with the resulting generation tariff.

xi. Establish if KPLC obtained value for money in the PPAs.

xii. Assess whether there is malpractice in the procurement of IPPs.

xiii. Make recommendations to improve risk allocation to KPLC and GoK and reduction in fraud, if any, associated with procurement of IPPs.

1.3 Scope for the Forensic Review

1.3.1 The IPPs that fell within the scope of the review are summarized below:

i. Thermal Plants: These comprised of Iberafrica Power (EA) Limited ("Iberafrica"), Thika Power Limited ("Thika"), Triumph Power Generating, Company Limited ("Triumph"), Rabai Power Limited ("Rabai") and, Gulf Power Limited ("Gulf").

ii. Geothermal Plant: Orpower 4 Inc

iii. Wind Plants: comprised of Lake Turkana Wind Power Ltd ("LTWP") and Kipeto Energy Limited

iv. Biomass Plants: Biojoule Limited

v. Small Hydro Power Plants: These comprised of Imenti Tea Factory Company Limited, Power Technology Solutions Limited, Metumi Power Company Limited, Hydro Project Service Peters Limited, Gura Power Company Limited, Chania Power Company Limited, REGen-Terem SHPP Limited.

1.4 Approach to the Forensic Review

1.4.1 The forensic review followed a combined approach where various methods of evidence collection were used to ensure accurate representation of facts relating to each of the reviewed subject areas. The methods used included; intervierws, document review, process walkthrough and, corporate intelligence procedures such as background checks.

1.4.2 The review also involved mapping the 17 Terms of Reference into into six (6) distinct workstreams, whereby a separate report was prepared for each workstream and summarised in this report on Procurement and Management of Power Purchase Agreement forensic review, read together with the workstream reports comprising of:

i. A summary report on Procurement and Management of Power Purchase Agreements forensic review.
ii. Report 2: Applicable Laws and Regulations, Stakeholder Roles and KPLC Oversight of PPAs.
iii. Report 3: IPP Selection Criteria - Events Chronology.
iv. Report 3A: Summary of Procurement Findings.
v. Report 4: Conditions Precedent on PPAs.
vi. Report 5: Beneficial Ownership and Contractors Used.
vii. Report 6: Operational Review.
viii. Report 7: IPP Financial Review,

1.5 Key Findings

Applicable Laws and Regulations

1.5.1 Iberafrica and Orpower were procured as per GOK circulars before 2001 through invitation to bid before enactment of Public Procurement and Asset Disposal Regulations, 2006, Public Procurement and Asset Disposal Regulations, 2020 respectively.

1.5.2 Rabai Triumph, Gulf and Thika were procured between 2005 and 2015 through competitive tendering when the applicable laws were the Public Procurement and Disposal Act, 2005 (Repealed), and the Public Procurement and Disposal Regulations (PPDR), 2006 (Repealed).

1.5.3 Lake Turkana Wind Power (LTWP) was procured through single sourcing following an unsolicited proposal to GOK in 2007 and was therefore, not assessed against any law.

1.5.4 Hydro Project Service Peters Limited (PTSL), Regen-Terem, Imenti, Kipeto were onboarded through unsolicited proposals to the Ministry of Energy's

(MOE) Feed in Tariff under the then Public Procurement and Disposal (Public Private Partnerships) Regulations, 2008.

1.5.5 Cedate, Malindi, Selenkei, Metumi, Gura, Chania, Strathmore, HPSPL, Biojoule were contracted through unsolicited proposals to MOE under Feed in Tariff between 2013 and 2015.

1.5.6 Review of procurement of PPAs against applicable laws at the time of procurement revealed several instances of noncompliance as summarized in Table 1 below:

Table 1: Noncompliance with the Applicable Procurement Laws and Regulations

Applicable Laws	Area of non-compliance	Impacted IPPs.
Competitive tendering between 2005 and 2009 • Public Procurement and Disposal Act, 2005 (Repealed) • Public Procurement and Disposal Regulations, 2006 (Repealed)	• No approvals sought from the tender committee.	Rabai, Triumph, Gulf and Thika
	• No Tender advertisement on newspapers.	Rabai
	• No International tendering.	Triumph, Gulf and Thika
	• No appointment of tender opening committee by the Accounting officer.	Rabai, Triumph, Gulf and Thika
	• Evaluation not as per criteria in the tender.	Triumph, Gulf and Thika
	• No confirmation of eligibility of successful bidders before award.	Triumph, Gulf and Thika
	• Lack of Notification of successful and unsuccessful tenderers.	Rabai, Triumph and Thika
	• Contract amendments compliance and lack of approval by tendering committee.	Rabai, Triumph, and Gulf
Procurement under PPD(PPP) Regulations, 2009 model between 30 March 2009 to 8 February 2013	• Noncompliance with IPP set schemes and a competitive bidding process. • No PPP steering committee approval. • Set conditions not met before awarding unsolicited bids.	PTSL, Regen-Terem, Imenti, Kipeto
Procurement under PPP Act, 2013 between 2013 and 2015	• No PPP Committee approval to get into a PPP arrangement. • Lack of PPP project preparation and record retention by KPLC. • Bids not solicited in an open, transparent, fair process.	Cedate, Malindi, Selenkei, Metumi, Gura, Chania, Strathmore, HPSPL and Biojoule

	• Privately Initiated Investment Proposals (PIIP) conditions not met.	
	• Feasibility study not conducted and approved by PPP committee.	Cedate, Malindi, Selenkei, Metumi, Gura, Chania, HPSPL and Biojoule

1.5.7 Thirteen (13) IPPs comprising of PTSL, Imenti, Kipeto, Cedate, Malindi, Selenkei, Metumi, Gura, Chania, Strathmore, HPSPL, Biojoule and, Regen-Terem were indicated to have been procured under the Feed in Tariff (FiT) policy. Their respective proposals were submitted to Ministry of Energy (MOE) whereby the MOE's FiT Committee was required to review and approve the Expression of Interest (EoIs), the subsequent proposals, feasibility studies and overall approval of the project. However, the expression of interests and proposals submitted by IPPs and corresponding Ministry approvals were not provided for review.

Roles played by stakeholders

1.5.8 The key stakeholders with respect to PPA procurement and contracting were the Ministry of Energy (MOE), Ministry of Finance (MOF), Regulator (Energy Regulation Board (ERB) / Energy Regulatory Commission (ERC) / Energy and Petroleum Regulatory Authority (EPRA)), Attorney General, and KPLC's Board, CEO and Company Secretary.

1.5.9 The Ministry of Energy (MOE) issued directives which impacted on how PPAs were procured and managed such as:

i. Extension of term of the PPA with Iberafrica and reduction of capacity charges in 2004.

ii. MOE request to Iberafrica and Tsavo for capacity enhancement in 2007.

iii. MOE Principal Secretary (PS) conveyed OrPower's request to be paid a special tariff to the KPLC Board in 2012. Documentation regarding whether OrPower was paid the special tariff was not provided for review.

iv. The PS, MOE's guidance to KPLC in 2014 to engage with OrPower on the expansion of Olkaria III to 150MW.

v. MOE communication of Cabinet approval of the LTWP project.

vi. The PS MOE's proposal that KPLC absorbs US cents 3.00/kWh of the LTWP tariff, with the rest being passed through to consumers.

vii. MOE view on the potentially high burden of deemed generation payments to LTWP.

viii. MOE guidance to KPLC to separate technical and commercial issues for Kipeto to commence the technical commissioning of the project.

ix. Directive to revalidate lapsed PPAs for Chania, Metumi and Gura.

x. Guidance to KPLC to engage OrPower on the expansion of Olkaria III to 150MW.

1.5.10 While the Government directives are not out of the norm, it is crucial that the roles governments and parties in the sector are clearly identified, and that processes are designed and understood, and that KPLC's Board has sufficient structures of accountability in place to safeguard the interests of its shareholders and consumers.

1.5.11 Ministry of Finance (MOF)/The National Treasury: The PPP committee approved financial risk assessment reports which were sought after the execution of PPAs for Cedate, Chania, Malindi, Selenkei and HPSP. This was against the procedures stipulated in the Public Private Partnerships Regulations, 2014 which required approval before execution of the PPAs.

1.5.12 Energy and Petroleum Regulatory Authority, formerly Energy Regulatory Commission (ERC): ERC approved the PPAs for Iberafrica, Triumph, Gulf, LTWP, PTSL before KPLC's Board's approval.

1.5.13 The Solicitor General: GOK in the letters of support to IPPs lenders on charging and assigning all present and future rights, titles, interests, and benefits led to Cedate executing debentures, charging and assigning all present and future rights, titles, interests and benefits based on the letter of support from GOK, in favour of its lenders. The Solicitor General (SG) noted that from the wording of the instruments (Debentures), the parties intended to transfer the benefit of the GOK support letter but not the obligations. However, GOK could not amend, vary or waive any provision of the GOK support letter, or exercise any right to rescind, cancel or terminate the GOK support letter without the prior written consent of Adili Trustees Limited. Correspondence between the Solicitor General and the PS, National Treasury and Planning, on the matter and how it eventually resolved was not provided.

Governance and Oversight of PPAs

1.5.14 KPLC had oversight structures for the procurement and approval of PPAs comprising of the Board of Directors which was responsible for approving the execution of the PPAs, IPP Board Committee responsible for reviewing PPA tender awards and recommending them to the full Board for approval, the KPLC MD and CEO responsible for execution of the approved PPAs, and; the Tender Committee responsible for reviewing submitted tenders and recommending award of tenders to successful IPPs. However, anomalies were identified in respect of those functions as follows:

i. Minutes of the KPLC Board which approved a number of PPAs were not provided for review.

ii. Several Board Minutes were not signed and therefore their authenticity could not be confirmed.

iii. There were Board Resolutions/Minutes which were signed by the Managing Director and not the Board Chair and the Company Secretary. In all of instances above, the sign off by the MD and Company Secretary was past the date when the Board resolution/meeting was indicated to have been made/held.

iv. Instances were observed where minutes highlighting Board approvals of the PPAs were signed after the PPA had been executed. These related to Biojoule, PTSL, Cedate, HPSL, Maindi and Selenkei.

v. The KPLC Board ratified PPAs for OrPower, Gulf, Triump, and Thika after they had already been executed.

vi. The KPLC Board overruled concerns raised by various stakeholders on LTWP. Those concerns included; from Board Member(s) on unsolicited bid from LTWP; sections of Management on the size of the plant during PPA negotiations; a Board Member on the signing of the PPA being premature based on the issues that had been raised and, by the World Bank on the LTWP project size which had led to its withdrawal of the Partial Risk Guarantee (PRG). Further, The ICT and PPA Committee raised concern about the high tariff charged for the HPSP project compared to other hydro power projects.

vii. KPLC Board IPP Committee negotiating with the LTWP, Iberafrica, and OrPower IPPs which was a function of the Management.

viii. KPLC Board PPA approval of Imenti and Regen-Terem PPAs was prior to approval by its IPP Board Committee.

IPP Selection Criteria

1.5.15 A total of twenty (20) PPAs procured between 1996 and 30 June, 2021 were reviewed during the audit. In the review, several procurement weaknesses were identified where IPPs were procured through unsolicited bids.

1.5.16 Procurement irregularities where Inconsistent tender submission details and evaluation were noted including the following:

i. KPLC single-sourced Mott Ewbank Precee (MEP) to review bids for Iberafrica tender and to assist with negotiations with OrPower.

ii. The MD was represented in the tender evaluation for leading to the award of Iberafrica PPA, whereby two of the bidders evaluated had not been invited to the tender evaluation. Further, the evaluation criteria was not included in the bid document which would have led to a skewed evaluation process.

iii. OrPower tender was awarded to Ormat (which owned OrPower) despite the other bidder CalEnergy being indicated to have scored higher points of 137 compared to Ormat's 116 and had a lower price offer.

iv. Africa Infrastructure Development Company representative was in the tender opening meeting despite the company not being invited to bid for Rabai. Further, a contract was awarded to Simba Energy on a single sourcing basis (offer later withdrawn) despite the bidder being disqualified for failure to meet minimum requirements.

v. The evaluation criteria applied for Gulf and Triumph tenders was different compared to the one under compliance with project milestones, specifically the commercial operation date.

vi. Triumph was progressed to financial evaluation despite not meeting the technical evaluation criteria.

1.5.17 High tariff costs were identified at the PPA negotiations stage, which were to be passed to consumers for Iberafrica, OrPower4, LTWP, Triumph, Gulf, Regen-Terem, HPSP, Malindi, Thika, Selenkei, Imenti. There were also inconsistencies on tariffs negotiated and approved by the Board, am examble being the signed PPA for Iberafrica.

1.5.18 Approval of Cedate, Chania, Malindi, Selenkei and HPSP PPAs were sought from the PPP committee after the PPAs had been executed contrary to the directive given by The National Treasury.

Planning and Project Feasibility

1.5.19 A detailed review of planning processes revealed several weaknesses that could have contributed to higher costs of power purchase as follows:

i. Review of the Board minutes and other documents revealed limited discussions about the necessity to continue with projects that would be delayed such as those under the Feed in Tariff (FiT) with difficulties in obtaining financial closure or had notable difficulties such as LTWP.

ii. Development plans in the past 10 years have overestimated demand for power, which created an environment under which a premium was placed on contracting new projects regardless of cost efficiency. In October 2018, KPLC Management and Board raised concerns over contracting additional PPAs citing projected excess generation capacity compared to the pace of growth in electricity demand.

iii. There has been a weak relationship between projects identified in Master Plans and those developed. This was partly due to projects under the FiT being developer-led and others being identified under bilateral agreements (for example, LTWP).

iv. LTWP project was progressed despite concerns raised by the World Bank, KPLC Board and Management about ability of the project to be accommodated by the Kenya power system.

v. Weaknesses were also identified in the current planning arrangements that creates a risk of contracting more Variable Renewable Energy (VRE). For example, current tools do not cover ramping rates or a storage model.

Demand Risk

1.5.20 There seem to be divergent views with respect to power demand. This was evident in the case of LTWP as highlighted earlier, most recently in 2018 when KPLC cited Least Cost Power Development Plans (LCPDP) 2017 – 2037, had projected excess generation capacity beginning from 2018 and worsening in the next 6 years. These concerns were raised with ERC who requested KPLC to consult widely on the matter, including consultations with policymakers, as the decision had far-reaching implications.

1.5.21 While differences of opinion are inevitable in any sector, these examples highlight lack of clear responsibilities in the procurement of new capacity. Clear responsibilities of energy sector stakeholders, and how these responsibilities link to the planning process is critical. Given KPLC takes on demand risk due to the take-or-pay nature of the variable renewable energy (VRE) projects, it is critical that there are efficient planning and dispatch processes to minimize the risk of deemed generated energy payments in new and existing capacity.

Conditions Precedent in PPAs

1.5.22 Conditions Precedent (CPs) should ordinarily be fulfilled or waived within a specified period, beyond which a PPA is terminated and deemed to be null and void. However, documents to support fulfilment of stipulated statutorily regulated CPs were not provided for review and for those provided, their validity could not be confirmed as in the case of documents for OrPower, Thika and Strathmore. Failure to fulfil statutorily regulated CPs has an impact on the legality of the PPA.

1.5.23 The target effective date and the long stop effective dates were observed to occur before the execution dates of the Strathmore and PTSL PPAs. The effective date is when certain obligations outlined in the contract begin. They cannot begin on an unsigned/unexecuted contract. The two CPs were noted, for which the financial implication risks may have materialized as follows.

i. A grid connection agreement in relation to the connection of the plant to the transmission interconnector was executed by LTWP and KETRACO. Delays in the fulfilment of obligations under the agreement led to deemed generated energy charges payable by GOK and KPLC.

ii. Documents to confirm that Imenti paid KPLC Kshs.2.5 million in respect of installation, testing and commissioning of the 11kv circuit breaker were not provided for verification.

Beneficial Ownership of IPPs and Contractors

1.5.24 Beneficial owners (BOs) are considered to have considerable influence over an entity/engagement. There have been growing concerns at a global scale over the anonymity and/or concealment of such beneficiaries. The consensus has been that such anonymity and concealment may present opportunities for suspicious financial activities.

1.5.25 The Legal and Regulatory Framework governing disclosure of beneficial ownership in Kenya was introduced in July 2019 with the requirement for companies' disclosure of beneficial ownership information to the procuring entity from the year 2022. This was after the 20 IPPs had been procured.

1.5.26 Assessment of the beneficial owners of the 20 IPPs that were in the audit scope revealed the following:

i. Several IPPs were found to have common shareholding as reflected in the searches done between 1 April 2022 and 26 May 2022. These include Cedate and Selenkei, Rabai and LTWP, Iberafrica and Thika, Thika and Rabai.

ii. There was a variance in the list of shareholders and Directors for Rabai Power Limited as per the file perusal conducted on 18 May 2022 at the Companies Registry and the BO information provided by Business Registration Service (BRS) on 03 June 2022.

iii. A search conducted on 1 April 2022 revealed that Kenya Power and Lighting Company Limited Staff Retirement Benefits Scheme 2006 and the Kenya Power and Lighting Company Limited Staff Retirement Benefits Scheme (together referred as 'the Schemes') were listed as shareholders of Gulf Power Limited. The membership of the schemes comprised of active in-service employees of KPLC as of June 2006, deferred members of the Scheme and retirees of KPLC. However, Article 73 of the Constitution of Kenya requires a public officer to use his best efforts to avoid being in a position where personal interests conflict with official duties. Further, Section 55 (2) of the Public Procurement and Asset Disposal Act prohibits a public officer from bidding for contracts or influencing award of a contract, to himself; a spouse or relative; a business associate; or a corporation, partnership or other body in which the officer has an interest. An award of contract to Gulf Power Limited would therefore be deemed to create a conflict of interest.

1.5.27 Beneficial Ownerships and Contractors used in twelve IPPs listed in Table 2 below were not disclosed despite efforts to obtain the information from the jurisdictions they are domiciled in. Identification of the BOs would therefore require Government-to-Government engagement and interventions to

overcome the foreign jurisdictions' legal restrictions on the access to that information.

Table 2: Beneficial Ownership of Independent Power Producers (IPPs)

IPP	Jurisdiction of unidentified Bos
Iberafrica Power (E.A) Limited	United Kingdom
Thika Power Limited	British Virgin Islands
Orpower 4 Inc United	States of America
Gulf Power Limited	Mauritius
Triumph Group Limited	British Virgin Islands and United Kingdom
Biojule Limited	Mauritius
Rabai Power Limited	Netherlands, United Kingdom
Lake Turkana Wind Power Limited	Mauritius, Netherlands, United Kingdom
Cedate Limited	Denmark, United Arab Emirates
Selenkei Limited	Denmark, United Arab Emirates
Hydro Project Services Peters Limited	Mauritius
Malindi Solar Limited	Canada, United Kingdom

PPA Price Structures

1.5.28 The key price structures in the PPAs for 20 IPPs in scope were reviewed against international practices to assess if improvements could be made that could benefit KPLC. The review considered the pricing structure by technology as the pricing arrangement generally varies by type of PPA. The following observations were made:

i. PPAs for Thermal IPPs: The price structures for thermal IPPs appeared reasonable. A development that could be incorporated in future contracts could be provision of incentives when plant availabilities were greater than the stipulated 85% in the PPAs.

ii. PPAs for Geothermal IPPs: For all Orpower 4 units, inflation adjustments were provided on the capacity and energy components, with all the energy components subject to inflation adjustment, and 50% of the capacity components inflated each year. For future PPAs it is recommended to split the capacity component in a capital cost recovery component and a fixed operation and maintenance cost recovery component, whereby the split must be cost reflective and will be determined by the IPP as part of its proposal.

iii. PPAs for wind IPPs: Deemed generated energy payments were charged at the energy rate and levied on an estimate of the net energy output in the period of the deemed energy based on actual wind data by turbine and forecast performance. The estimation approaches need to ensure that interrelationships between turbines are fully captured and that shedding (wake effects due to the presence of a wind turbine affecting the wind speeds in related turbines) and related factors are considered. The use of facility-based wind models, used to manage wind based PPAs in other countries, could be developed and used in Kenya.

iv. PPA for Biogas IPP: As in other technologies under the FiT regime, an energy-based charging mechanism is appropriate. 15% of costs in the Biojoule Kenya PPA were subject to inflation adjustment, reflecting an element of costs that were variable in nature. Deemed energy charges were levied at 70% of the energy charge rate. It was unclear why a rate of 70%, which is lower than the total share of non-adjusted costs (85%) in the PPA, was set.

v. *PPAs for solar and small hydros IPPs:* There were no exceptions noted in the price structures for solar and small hydros. These plants are non-dispatchable and had similar take-or-pay arrangement which was appropriate. However, with respect to solar, ensuring that any payments for deemed energy are adjusted for previous plant performance is critical to ensure these payments are not inflated.

Energy Procurement

1.5.29 An analysis of energy procured over 5 years to 30 June 2021 revealed that from the 2016/2017 financial year (10,205 GMW), the amount of energy purchased increased over the years with the only decline being experienced in the 2019/2020 financial year (11,462 GMW). The decline in this financial year could be attributed to the onset of the COVID 19 pandemic in the second half of the financial year. 12,101 GMW were procured in FY 2020/2021. The analysis further revealed the following:

i. Comparison of Power Purchase Costs from IPPs and KenGen: Power purchase costs from IPPs on average have been higher than those for KenGen. However, it was not possible to conclude that the price difference reflects fundamental problems in the purchasing arrangements for IPPs without considering; different technologies used by the IPPs, concessional finance and the lower cost of capital of KenGen plants unlike IPPs and construction periods – most KenGen plants are older. Given difficulties in comparison, it would be more appropriate to consider if the IPP procurement could have been more effective and occurred at lower costs. An overall recommendation is that procurement of all new capacity should be through competitive procurement processes and KenGen should be allowed to participate in these processes.

ii. IPP power purchase analysis review: Capacity charges paid to the IPPs in the five years to 30 June 2021 amounted to KShs.109.7 billion. KPLC paid Kshs.63.6 billion to the IPPs in the five financial years, being energy charges for the plants' net electrical output (NEO) compared to capacity charges of 109.6 billion. Of this NEO amount, Kshs.40.4 billion (63.5%) was paid for energy procured from LTWP plant.

iii. Fuel payments: In the five-year period to 30 June 2021, KPLC paid Kshs.99.4 billion in fuel costs to the power producers. The largest share of the fuel costs (45%) was taken up by the IPPs amounting to Kshs.44.3 billion, with KenGen taking up 38% amounting to Kshs.37 billion. Fuel costs paid to Aggreko and

the off-grid power producers amounted to Kshs.9.3 billion (9%) while imports amounted to Kshs.7.7 billion (8%) comprising payments made to Uganda Electricity Transmission Company Limited (UETCL).

iv. Energy to costs analysis: An analysis of energy to cost based on KPLC's audited financial statements for 2019/2020 and 2020/2021 financial years was performed per type of plant (thermal, geothermal, wind, and/or small hydro) where the following observations were made:

- Geothermal: The unit energy cost for IPP owned plants was higher compared to that of KenGen owned plants. However, for geothermal power, costs can vary significantly by site due to differences in production and development costs and site yields.
- Thermal power: IPPs are seen to have a higher cost to energy (Kshs/MWh) ratio. In 2021, for example, thermal plants were responsible for 7.2% of energy volumes purchased by KPLC but 31% of purchase costs, indicating a significant relative cost burden. Roughly two-thirds of the costs reflect capacity and non-fuel energy costs, indicating limited scope to reduce overall thermal purchase costs during PPA lifespans given the low existing load factors.
- Wind power: For wind power plants, the energy generated by IPP plants is far greater than that produced by KenGen plants. The unit cost of the IPP plants in 2019/2020 financial year solely reflects payments to LTWP, which consisted of non-fuel costs and payments for deemed generated energy.
- Small hydo plants: KenGen plants have a slightly lower unit energy cost compared to IPP owned plants. A further analysis of the individual IPPs revealed that the plants had varying unit costs of energy. The differences across IPPs reflect the different tariffs applied under the feed-in-tariff regime.

Invoice and payment process

1.5.30 KPLC´s energy purchase workflow, a bulk energy invoice verification process outlines requisite information for the verification process. However, there were no substantial rules for the verification process itself or on the quality of data/documents to be used. An escalation process was not described for cases where disputes on the invoices could not be solved during the verification process. Additionally, no references were made to a dispute resolution process outlined in the PPAs.

1.5.31 In overall, the IPP invoice review and approval process seemed to rely on attached documents/results. Failures in those documents, attached as appendices to some of the invoices, like incomplete documentation or non-alignment, were not marked as such. There is, therefore, a need for rigor in the review process and for a second reviewer independent of the first reviewer. An invoice review process guideline should be developed. While no

systematic bias in invoicing was identified, greater reliance on automated procedures with application of greater cross-checking of values will reduce invoicing risk and provide greater credibility in the payment processes.

1.5.32 Review of the invoicing and payments process which including re-computation of paid invoices per plant type revealed the following inconsistencies and anomalies:

i. Thermal – Invoice review for Rabai – May 2021

- The capacity charge was computed according to formulas in Schedule 6 of the PPA. However, the charge for contracted capacity was not clear. Rabai used the test result from the contracted capacity from January 2021 in the computation on the May 2021 invoice, although higher test values (up to 90 MW) had been approved in March 2021.
- Monthly availability had a direct impact on capacity charges if the availability dropped below 80% for a period of six months. Deviations were noted in the computation of the monthly target availability.
- Only 150 starts per year were not counted as "Excess Starts". This value appears very low for a plant of 5 Diesel Generators (DG), especially since DG were used to balance for Variable Renewable Energy (VRE) generation. Cost benefit analysis can be done to compare the current approach versus negotiating a fee for each start-up.
- A document proving the contract capacity to be used for the capacity charge (CCSD) was not included. In addition, the maintenance schedule accompanying the invoice was incomplete. All invoice calculations inputs should be specified and supported by documents accompanying the invoices for ease of cross-referencing.

ii. Geothermal – Invoice review for OrPower 4 May 2021

- For plant 1 and plant 3, there was no daily dispatch or Net Electrical Output (NEO) data available from the National Control Center (NCC) to cross-validate the meter readings for purposes of calculating the energy charge.
- Variances were noted due to lack of clear guidelines on how to apply the accumulated availability factor in the PPA. A clearly defined calculation methodology for capacity adjustment, with review and amendment of the accumulated availability correction factor required should be documented.

iii. Wind – Invoice review for Lake Turkana Wind Power Ltd – May 2021

- There were 4 occasions where LTWP forecasted excess NEO. LTWP was liable to small forecasting penalties for under-forecasting. The same data reflected that on average, LTWP forecasted capacity was 20% above that generated. However, no penalties were included for over-forecasting. Over forecasting may distort the energy dispatch processes at the NCC. It is

recommended that KPLC develops a more balanced concept of forecasting, which includes impacts on the generators' payments.

iv. Solar PV – Invoice review for Strathmore University – May 2021

- Images of the main and backup meter readings for the month of May, 2021 in respect of Strathmore University were not provided for verification while those for other months were attached to the invoices.
- The energy charge rate on the invoices billed to KPLC was $0.12/kWh. However, computation of amounts applied revealed that a higher value was used ($0.121205/kWh), and that the written value of $0.12/kWh reflected the rounded rate. Given the May 2021 invoices had been paid with concerns highlighted above, this may be indicative of an invoicing process without sufficient checks and rigor.

v. Small Hydro – Invoice review for Chania – May 2021

- Images of the main and backup meter readings were not provided with the invoice as required. However, signed meter reading sheets by representatives from KPLC and Chania were attached to the invoice.
- The energy charge on the invoice billed to KPLC was $0.104/kWh. However, computation of amounts applied revealed that a higher value was used ($0.10442). The rate $0.104/kWh on the invoice therefore seemed like a rounded figure.
- Based on computation of the charge rate, using applicable Consumer Price Index (CPIs), the tariff rate used understated the bill by $30.66 (excluding VAT) or 0.26%. according to clarifications received from KPLC on 24 June 2022, the base CPI was set as 244.733 on the PPA dated 25 May, 2017. However, the PPA was not provided for review

vi. Biogas – Invoice review for Biojoule – May 2021

- There was no daily dispatch or NEO data available from the NCC to cross-validate the meter readings for purposes of calculating energy charge.
- According to energy dispatch schedules provided by KPLC, 39,146 kWh was reflected as the energy dispatched during the month. However, a daily and half-hourly validation of this value from NCC data was not possible due to the absence of verified dispatch data.

Plants Performance Assessment

1.5.33 Assessment of plant performance based on the type of plant revealed as follows:

i. Thermal and Geothermal: At the time of the review, KPLC held PPAs for six thermal power plants, five of which were based on diesel generators and the sixth was a geothermal PPA.

- The PPAs for the Diesel thermal power plants contained three key performance indicators: Plant Capacity; Availability; Fuel Consumption. Triumph Power and Rabai Power failed to achieve the contracted capacity at the signature date (Triumph Power in 2019, 2020 and 2021; Rabai Power in 2020). In these cases, for dispatch and invoicing purposes, the Contracted Capacity at Signature Date (CCSD) was applied.

- There were contracted capacity variations for the for OrPower plants 1, 2 and 3. No documentation was provided for review, confirming approval of changes to the PPA by the Board.

- PPAs for the thermal power stations did not contain any monitoring rights for KPLC during construction and operation. They also did not include obligations for the IPP to provide any reports on financial and technical performance on a monthly and/or annual basis. However, KPLC could utilise the following tools to enforce performance of the IPPs in respect to achieving KPIs as well as the dispatch instructions: Test of Contracted Capacity at Signature Date (CCSD); Annual Contracted Capacity Test; Availability failures; and Reduced availability.

- A target availability factor for a Diesel Power Generator or the geothermal power plant of 0.85, as set in the tendering documents, seems to be rather on the low side, considering that these plants have an average availability of 90%. The payment mechanism does not set strong incentives for the payment deduction factors which should commence below the 85% mark to be executed every month when availability is below this mark (as long as the unavailability was not scheduled and approved).

- Adjustments for capacity payments and the adjustment were not correctly applied in the invoicing.

- Thermal IPPs were required to operate the plant in accordance with KPLCs' dispatch instructions and within a dispatch tolerance band of +/- 3%, provided that the NEO in any given settlement period was not less than requested in the dispatch instruction. However, the principle of dealing with over- and under-generation was not very often used in PPAs, yet over-generation seemed to happen on a regular basis while under-generation hardly occurred. This was evident in the case of Rabai Power high levels of over-generation observed on 10 May 2021, whereby the NEO exceeded KPLC's dispatch instructions between 14:30 and 23:30 hours in the range of 4.3% to 21.1% beyond the declared capacity at the time.

ii. Large scale renewable energy plants: There were two large scale wind IPPs connected to the grid comprising LTWP project and Kipeto project and three solar PV Projects comprising Selenkei, Cedate and Malindi. All five projects were based on take-or-pay PPAs, where power generation depends on the availability of the respective resources. The performance review revealed the following:

- LTWP capacity factor: There were large variations (45.5% to 57.4%) probably due to seasonality of wind speeds. It would be beneficial to observe wind patterns for a longer period to determine a realistic Deemed Energy Threshold (DET12) considering that the current 62% capacity factor had not been achieved.
- LWTP Forecasting accuracy: In circumstances where forecasted electricity generation in an hour exceeded the actual delivered NEO, KPLC was obliged to take the entire NEO delivered to the delivery point and pay for it. In those cases where the actual NEO exceeded the forecasted value, KPLC would either take all the NEO and pay for it or request the IPP to curtail the plant to the forecasted value. The IPP therefore, had the option to deliver all the NEO, with the knowledge that it would not receive payment for the NEO exceeding the forecasted electricity generation plus a 9 MW threshold. The forecasting system and the resulting incentives should be revised in future to provide clear incentives to the IPP, to keep the forecasts as precise as possible.
- LTWP deemed generated energy calculation and wind plant performance: Uncalibrated anemometers on top of the wind turbine generators are used to measure wind speeds. These do not provide data with the level of accuracy that is typically used for metering. Relevant measurement devices such as anemometer need to be independently established from the plant and calibrated on a regular basis.
- Guaranteed availability: PPAs for LWTP and Kipeto PPAs contained a guaranteed availability value of 78% and 80% respectively. However, both PPAs contain a mechanism which sees a reduction in payments when the guaranteed availability is not met for a period of three (3) consecutive months for LTWP or six (6) for Kipeto. There should be a consideration to adopt international standard practices, where penalties and termination apply when the guaranteed availability is not met over a period of time.

Heavy Fuel Oil Procurement

1.5.34 Review of procurement of Heavy Fuel Oil (HFO) as documented in the PPAs applied to the 5 thermal plants, based on the documents provided for review revealed the following:

i. Delayed response by KPLC on the HFO procurement evaluation results for the Rabai PPA.

ii. Notice issued to KPLC for the HFO tender opening not within the stipulated time (7 days) to allow KPLC oversight. This was the case for Iberafrica and Rabai.

iii. Gulf Power executed Fuel Supply Agreement (FSA) with Vivo Energy Kenya prior to KPLC approval.

1.5.35 There is need for KPLC to ensure to adherence to HFO procurement process as stipulated in the PPA. Delayed notifications and responses from both parties could result in delay of the HFO procurement process and the signing of the FSA. The FSA is a paramount document for the fuel supply process and therefore delay in signing the FSA could result to delay in supplying the fuel required for power generation. Execution of the FSA without KPLC's consent of the terms therein could result into disputes during the payment of the fuel charges by KPLC if the specifications of the fuel supplied was not agreed upon by the IPP and KPLC.

Tariffs Review

1.5.36 Renewable energy IPPs: Apart from the tariff on Imenti Tea Factory's PPA, all other tariffs were observed to be following the FiT policy. For Imenti, it was noted that the applied tariff was below the least tariff of 0.0825 US $/kWh.

1.5.37 Other IPPs: The tariff values on the Rabai PPA dated 4 September, 2008 were different from those on the invoice. Amendments were made to the referenced PPA via a first amendment agreement dated 30 October, 2015. This agreement was not provided for review and therefore, it was not possible to confirm if the PPA values were also amended/updated to the invoice values.

Project timelines review

1.5.38 Changes to project timelines were effected through variations or amendments to the existing PPAs. Review of applicable Laws and Regulations, stakeholder roles and KPLC oversight of PPAs which entailed comparison of the project timelines between the initial and current PPA revealed variations to Strathmore and Chania project timelines whose approvals were not provided.

Project Construction Risk

1.5.39 The Government of Kenya (GOK) took over the liability to construct the necessary transmission infrastructure from LTWP with the stated benefit being price ("using concessionary funding procured by GOK from development partners"). The risk of failure to complete the line on time was not given the necessary attention and action.

1.5.40 The Deemed Generated Energy (DGE) amount if the Transmission Interconnector (TI) was not ready by the time required by LTWP to commission the first 50MW was Euro 1.7 million for the first month, increasing monthly by Euro 850,000 rising to Euro 10.2 million per month once the entire 300MW wind farm was completed. However, a previous special audit on LWTP established payment of Euro 85,684,017 for DGE out of the Euro 167,261,165 which had accumulated as at 31 May, 2018. The balance of Euro 81,577,128 was to be recovered by LTWP through a tariff increase by KPLC of Euro 0.00845/kWh for the period 01 June, 2018 to 31 May, 2024 (DGE recovery period) and therefore, likely to be borne by consumers.

Financial Models

1.5.41 Renegotiation risk: Only Kipeto Energy had the requirement for a financial model referenced in the PPA and developed at financial clause. The financial model should form a cornerstone of the transaction and provide the analytical basis to any future change in conditions or compensation payment. Doing so protects KPLC in the case of revision, minimizing the scope for dispute and/or over-paying in the case of changes to project conditions. A requirement should, therefore, be included in all new PPAs for an audited financial model to be developed.

1.5.42 Analysis of IPPs' audited accounts was not carried out, as none of the 20 IPPs had a requirement in the duly executed PPAs for the IPPs to provide audited financial statements to KPLC on an annual basis or as required. In addition, none of the IPPs is a listed entity either in Kenya or overseas making their audited financial statements not accessible to the public.

1.5.43 A requirement should be included in new PPAs for IPPs' audited financial statements to be shared with KPLC annually. The financial statements would be relied on for review of the financial and operational parameters alignment with the financial models.

Value for Money Review

1.5.44 There was limited evidence of value for money analysis being conducted for all projects. Fourteen (14) out of the twenty (20) scoped IPPs submitted unsolicited bids to the Government through the Ministry of Energy. Workstream limitations, value for money and financial risk assessment reports that were received and reviewed by the PPP Directorate at The National Treasury which informed their approval to KPLC to enter negotiations with the IPPs were not provided for review. Further, confirmation from the PPP Directorate that value for money was confirmed at financial close for respective PPAs approved was not provided.

1.5.45 While unsolicited bids allow governments to benefit from the knowledge and ideas of the private sector, proposals do not originate as part of a government planning process and, in some cases, by definition, are not part of sector plans. There is also absence of transparent and competitive procurement process which could result in lack of value for money from the PPP project, given the lack of competitiveness or this might provide opportunities for corruption.

Payments

1.5.46 High tariff costs were identified at the PPA negotiations stage, which were to be passed to consumers in the case for Iberafrica, OrPower4, LTWP, Triumph, Gulf, Regen-Terem, HPSP, Malindi, Thika, Selenkei and Imenti.

1.5.47 In a letter to ERC dated 8 October 2018, KPLC noted the demand risk arising from new power generation projects. It indicated that the pace of growth in

electricity demand showed levels similar to the ones anticipated under 'Low Demand Scenario' of the LCPDP, yet the power plants conceived under the 'High Demand Scenario (Vision)' continued to be progressed through to PPAs. A moratorium was placed on all PPAs not concluded as at 29 March, 2021 through a Presidential Gazette Notice No. 3076 dated 29 March, 2021. Moreover, KPLC faces several important risks in meeting these obligations as follows:

i. Tariff risk - KPLC reported consecutive profits of Kshs.1,489,688,000 and Kshs.3,504,389,000 in 2020/2021 and 2021/2022 financial years after reporting a loss in 2019/2020 of Kshs.939,482,000. The increase in profits for 2021/2022 was majorly attributed to deferred tax charge credits from previous years. The financial performance in the near future was likely to be affected by increased foreign exchange losses, system inefficiency losses, borrowing costs, and implementation of the power bill reduction by 15% introduced early in 2022, whereby the other Semi-Autonomous Government Agencies (SAGAs) in the electricity sub-sector electricity supply chain comprising the Kenya Electricity Generation Company PLC (KenGen), the Kenya Electricity Transmission Company Limited (KETRACO), and the Geothermal Development Company Limited (GDC) were yet to contribute to cost reduction initiatives as per the agreed framework.

ii. Default Risk – Increased demand for DGE payment obligations due to new plants being added under the 'High Demand Scenario' without the corresponding tariff increase (revenue) could result in default by KPLC that would lead to PPA termination.

iii. Customer risk - KPLC´s revenue base is being impacted by customers taking out their own self generation (especially solar PV), a process that may accelerate in future years should the respective prices of self-generation remain competitive against grid supply.

iv. Market risk - potential moves to allow large customers to contract power directly could also result in KPLC having a smaller customer/energy base with which to make payments.

1.5.48 Documentation reviewed also suggested that KPLC has been required to absorb some of the cost of the IPP program and pass other costs to consumers, notably in the case of Iberafrica, OrPower4, LTWP, Triumph, Gulf, Regen-Terem, HPSP, Malindi, Thika, Selenkei, Imenti.

Default Risk

1.5.49 The PPA purchase program was initiated without any formal sovereign guarantee being provided by the GOK. At the same time, no payment default has been identified under this review. In place of a sovereign guarantee, GOK has provided Letters of Support, which provide cover against political risk, change in law and force majeure. Moreover, use has been made of Escrow

Accounts, Partial Risk Guarantees and Letter of Credits provided by local banks and institutions like the African Development Bank.

1.5.50 For future tenders, analysis should be conducted on whether more formal sovereign guarantees would allow lower tender prices. However, given that projects had proceeded without requiring project proponents to seek international payment risk insurance, no major changes in approach are recommended.

Malpractices, Implications, and Responsible Persons

1.5.51 The forensic review identified several malpractices in the procurement and implementation of IPPs. The impacts of the malpractices and responsibilities is indicated below:

Table 3: Summary of Malpractices Implications and Responsible Persons.

No.	Finding / Malpractice	IPP Impacted	Period / Years	Responsible Parties and Financial Implications Where Applicable
1.	**Noncompliance with the applicable procurement laws and regulations (Public Procurement and Disposal Act, 2005 (Repealed) and Public Procurement and Disposal Regulations, 2006 (Repealed))**			
i.	Requisite approvals not sought from the tender committee	Rabai, Triumph, Gulf and Thika	2006 - 2013	KPLC Supply Chain Function and Tender Evaluation Committee
ii.	Tenders not advertised.	Rabai	2006	KPLC Supply Chain Function
iii.	KPLC did not comply with international tendering requirements.	Triumph, Gulf and Thika	2009	KPLC Supply Chain Function
iv.	KPLC Accounting Officer (CEO/MD) did not appoint a Tender Opening Committee.	Rabai. Triumph, Gulf and Thika	2006 2009	Zachary O. Ayieko – KPLC MD. Eng. Joseph K. Njoroge – KPLC MD
v.	Proposals not evaluated as per criteria in the tender.	Triumph, Gulf and Thika	2009 2010	Tender Evaluation Committee
vi.	KPLC did not confirm eligibility of successful bidders before the award.	Triumph, Gulf and Thika	2010, 2009 2011	Tender Evaluation Committee
vii.	KPLC did not send notifications to successful and unsuccessful tenderers.	Rabai, Triumph and Thika	2006, 2010 2011	KPLC Supply Chain Function
viii.	Contract amendments not comply with prescribed price or quantity variations for goods and not approved by the KPLC tender committee.	Rabai, Triumph and Gulf	2008, 2016 2012, 2021 2013	KPLC Legal Team, Tender Evaluation Committee
2.	**Documentation to confirm compliance with Procurement under PPD(PPP) Regulations, 2009, between 30 March 2009 to 8 February 2013 not provided.**			
i.	• Non-Compliance with IPP set schemes and a competitive bidding process. • Lack of PPP steering committee approvals. • Set conditions. not met before award of contracts for unsolicited bids • PPP Steering Committee's approval before entering into the PPP agreement.	• PTSL • Regen-Terem • Imenti, • Kipeto	• Before September 2012 • 2009 • 2009 • Before June 2012	MOE, NT / PPP Steering Committee
ii.	Recommendation of the Steering Committee before issuance of Letters of Support (LOS).	Kipeto	4 August 2017	Henry Rotich - CS, NT Eng. Joseph K. Njoroge - CS, MOEP
iii.	Variations or amendments to PPP agreements made after approval by the PPP Steering Committee.	Regen-Terem,	2013	KPLC Board
iv.	• PPP Committee approval to get into a PPP arrangement. • PPP project preparation and record retention by KPLC.	a) Cedate b) Malindi c) Selenkei d) Metumi e) Gura	a) 2009, b) 2005 c) 2014 d) 2015	MOE

No.	Finding / Malpractice	IPP Impacted	Period / Years	Responsible Parties and Financial Implications Where Applicable
	• Bids solicitation in an open, transparent, fair process. • Privately Initiated Investment Proposals (PIIP) conditions that were met.	f) Chania, g) Strathmore h) HPSPL i) Biojoule	e) Before July 2014 f) Before January 2012, g) Before July 2014, h) Before November 2013, i) Before September 2013.	
v.	Feasibility studies done and approved by the PPP Committee.	Cedate, Malindi, Selenkei, Metumi, Gura, Chania, HPSPL and Biojoule	2009, 2005 2014, 2015 Before July 2014, Before January 2012, Before July 2014, Before November 2013, Before September 2013.	MOE, PPP committee
3.	**MOE directives that impacted how PPAs were procured and managed**			
i.	Extension of the term of the PPA with Iberafrica and reduction of capacity charges	Iberafrica	2004	Patrick Nyoike - MOE PS Hon. Simeon Nyachae, Minister of Energy. a) *Extension of PPA for 15 years from 27 August 2004 at a reduced capacity charge rate of US$ 197.5/kWh/yr from US $ 395/kW/yr.*
ii.	MOE request to Iberafrica and Tsavo for capacity enhancement in 2007	Iberafrica	2007	Patrick Nyoike -MOE PS a) *Charge rate of US$285kW/yr for Iberafrica.*
iii.	MOE PS conveyed OrPower's request to be paid a special tariff to the KPLC Board in 2012.	OrPower	Before June 2012	Patrick Nyoike - MOE PS
iv.	MOE PS guidance to KPLC in 2014 to engage OrPower on the expansion of Olkaria III to 150MW	OrPower	28 March 2014	Eng. Joseph K. Njoroge - MOE PS b) *Base Energy charge rate of US$0.021434/kWh and a base Capacity charge rate of US$525.45/kW/year.*
v.	MOE communication of Cabinet approval of the LTWP project (Annexure 1.3.1.26).	LTWP	25 May 2009	Patrick Nyoike - MOE PS a) *Euro cents 7.22/kWh.*
vi.	The MOE PS proposal that KPLC absorbs US cents 3.00/kWh of the LTWP tariff, with the rest passed through to consumers.	LTWP	Not indicated	MOE a) *US cents 3.00 kWh while the balance from Euro cents 7.22/kWh would-be pass-through costs to the customers*
vii.	MOE view on the potentially high burden of deemed generation energy payments	LTWP	Not indicated	MOE a) *Euro cents 7.22/kWh.*
viii.	Directive to revalidate lapsed PPAs	Chania, Metum, Gura	13 December 2016	GOK. *a) Chania – 9.55 US cents / kWh,* *b) Metumi – 8.55 US cents / kWh,* c) *Gura – standard tariffs and escalators were not attached to the* PPA.

No.	Finding / Malpractice	IPP Impacted	Period / Years	Responsible Parties and Financial Implications Where Applicable
ix.	The PPP committee approved financial risk assessment reports after the execution of PPAs	Cedate, Chania, Malindi, Selenkei and HPSP	26 April ,2019	NT PS – Dr Kamau Thugge. PPP Committee Members.
x.	ERC approved the PPAs before KPLC's Board approval	Iberafrica Triumph Gulf LWTP PTSL	2007- 2013	Eng. Kaburu Mwirichia - ERC DG, Catherine A. Kola - ERC Commission Secretary Mueni Mutunga - ERC Commission Secretary Dr. Frederick Nyang (Ag. Director General ERC)
4.	**Governance and Oversight of PPAs**			
i.	Several minutes of the KPLC Board approvals of PPAS not provided for audit review.	Iberafrica, Rabai, PTSL, Regen-Terem, Biojoule, Cedate, HPSPL, Kipeto, Malindi, Selenkei, Chania, Metumi and Gura.	1996-2021	KPLC Board, and Management
ii.	Board Resolutions / Minutes signed by MD.	LWTP Biojoule HPSPL Kipeto Selenkei	2014 – 2019	Dr. Ben Chumo - Ag. MD Ken Tarus - Ag. MD Eng. Jared Othieno - Ag. MD
iii.	Board Minutes were not signed and therefore, factuality inconclusive.	Iberafrica OrPower Rabai LTWP Strathmore Regen-Terem Cedate Malindi Chania, Metumi, Gura	1996 – 2019	Respective Serving MDs/CEOs
iv.	Board approvals of PPAs signed after the PPA had been executed.	Biojoule, PTSL, Cedate, HPSPL Malindi, Radiant	2016 – 2018	Hon. Kenneth Marende, and Amb (Eng) Mahboub Maalim Mohamed – KPLC Board Chairs Beatrice Meso and Imelda Bore – Company Secretaries
v.	KPLC Board ratified PPAs that had already been executed	OrPower, Gulf Triumph, Thika	1998, 2010, 2012 and 2013	KPLC MD – Samuel Gichuru. Eng. Joseph Njoroge - MD&CEO, and Laurencia Njagi, Company Secretary. IPP Committee / KPLC Board
vi.	KPLC Board overruled concerns raised by various stakeholders	LTWP	9 November, 2009	KPLC Board *Euro cents 7.22/kWh (LTWP)* *US$0.105/kWh (HPSPL)*
vii.	KPLC Board IPP Committee (not Management) negotiating with the LTWP and Iberafrica IPPs.	Iberafrica LTWP	2001 and 2011	KPLC IPP Board Committee *Euro cents 7.22/kWh (LTWP)* *US$280/kW/Yr(*Iberafrica*)*
5.	**Procurement irregularities relating to Inconsistent tender submission details and evaluation**			
i.	KPLC single-sourced Mott Ewbank Precee (MEP) to review the bids for Iberafrica tender and assist with negotiations with OrPower	Iberafrica	11 March 1996	M. A Gupta - KPLC Corporate Planning Manager and Samuel Gichuru – KPLC MD
ii.	MD attending tender evaluation for Iberafrica. Two entities whose bids were evaluated had not been invited and, Different evaluation criteria used	Iberafrica	30 April 1996	Mr. Edwin Wassuna, Chief Operating Development Manager, Mr. A. Gupta, Corporate Planning Manager, and, Mr. M. Kamau, Personal Assistant to Managing Director (MD)

No.	Finding / Malpractice	IPP Impacted	Period / Years	Responsible Parties and Financial Implications Where Applicable
iii.	Award to Ormat (owned OrPower) scored higher points of 116 compared to CalEnergy's 137	OrPower	12 March 1998	Samuel Gichuru – KPLC MD and A. Mugo Njagi – Chief Engineer, Corporate Planning
iv.	Africa Infrastructure Development Company representative presence in the tender opening for Rabai which it was not a bidder.	Rabai	8 September 2006	Tender Opening Committee
v.	Different criteria applied for Gulf and Triumph Tenders	Gulf Triumph	24 December 2009	Tender Evaluation Committee
vi.	Triumph progressed to financial evaluation despite not meeting the technical evaluation criteria	Triumph	24 December 2009	Tender Evaluation Committee
vii.	High tariff costs were identified at the PPA negotiations stage, which were to be passed to consumers for Iberafrica, OrPower4, LTWP, Triumph, Gulf, Regen-Terem, HPSP, Malindi, Thika, Selenkei, Imenti.	a) Iberafrica b) OrPower c) OrPower d) LTWP e) Gulf f) Regen-Terem g) HSPS h) Malindi i) Thika j) Selenkei k) Imenti l) Iberafrica	a) 2009 b) 2014 c) 2011 d) 2016 e) 2010 f) 2009 g) 2017 h) 2016 i) 2011 j) 2016 k) 2009 l) 2007	ERC, KPLC Board a) US$ 394,800 to be passed through to customers b) Base Energy Charge Rate of US$0.021434/kWh and a base Capacity Charge Rate of US$525.45/kW/year. c) Base Energy charge rate of US$0.01924/kWh and a base Capacity charge rate of US$525.45/kW/year. d) Euro Cents 0.30/kWh e) Euros 0.00845/kWh f) US cents 0.41/kWh g) US Cent 2.60/kWh h) US$ 320.355 to be allocated through a retail tariff adjustment. i) US$ 11.84 million to be allocated through a retail tariff adjustment. j) Annual revenues of Euro 16.8 million allocated through a retail tariff adjustment. k) Annual revenues of US$ 12,965,400 million allocated through a retail tariff adjustment l) Tariff in excess of US cents 2.60/kWh
viii.	Approval of PPAs sought from the PPP committee after the PPAs had been executed	Cedate, HPSPL, Malindi, Selenkei and, Chania	2016, 2019, 2016, 2016 Not indicated	KPLC Board NT PS, Dr Kamau Thugge

1.6 Conclusion and Recommendations

Conclusion

1.6.1 The World Bank conference on Development Impact of Energy Infrastructure held in March, 2022 concluded that the cost of energy is tightly linked to economic development whereby higher levels of Gross Domestic Product (GDP) are correlated with greater energy/electricity use, access, reliability, and affordability. Power Purchase Agreements with power producers have a significant impact on electricity tariffs which form the basis of billing consumers. Unfavourable terms contained in the Power Purchase Agreements executed between the Kenya Power and Lighting Company PLC (KPLC) and Independent Power Producers (IPPs) have been linked to high cost of electricity. There is need for KPLC to review existing PPAs with a view

to addressing any conditions viewed as adverse to the Company and to consumers. KPLC management should also develop structures for contracting future capacity per the laws and provide for exit strategies where PPAs becomes unfavourable.

Recommendations

1.6.2 The forensic review report highlights several specific recommendations in the summary of key findings section and in the main body of the report. Additionally, other recommendations are highlighted in the ensuing paragraphs.

1.6.3 Corporate governance processes and internal controls should be strengthened to ensure that requisite approval processes is followed, and approvals obtained, including from the Board and Regulator before executing a PPA.

1.6.4 If appropriately modified, the Least Cost Power Development Plans (LCPDPs) should form the key basis for contracting new capacity, whether through KenGen or IPPs. An additional consideration could be to use planning tools to evaluate the continued feasibility of any project that is delayed beyond agreed timeframes and, provide KPLC with an exit strategy.

1.6.5 KPLC should ensure all CPs, including the statutory ones are met before contract execution. The wording on the effective date and the target effective date should be aligned to the PPA execution when the inherent obligations begin.

1.6.6 With regard to beneficial ownership, the implementation of recommendations below by the Management of KPLC with support of the KPLC Board of Directors should be considered:

i. A follow up on BO information with relevant authorities in UAE, Guernsey, BVI and Mauritius. This would address whether any stakeholders in the energy sector and in the approval process were conflicted during the contracting process. In addition, by leveraging on government systems and structures like the Directorate of Criminal Investigation (DCI) and the GOK Intelligence system, as well as the Office of the Attorney General, it can be established whether there are local beneficial owners in the IPP.

ii. The Companies (Beneficial Ownership Information) (Amendment) Regulations, 2022 do not connote a retrospective application of the Regulations. Laws only apply retrospectively if they are expressly stated as such. Since the identification of the BOs and the forensic audit of the IPPs is deemed a matter of national importance as a result of escalating energy costs, GOK through KPLC may require already contracted IPPs to provide beneficial ownership information on the strength of Regulation 13(7) of the Companies Regulations which provides that, *"Notwithstanding the provisions of this Regulation, the Government may seek, publish and publicise any*

important information regarding a company if such information affects the country".

iii. In compliance with the Leadership and Integrity Act, KPLC's Board and Management should use best practices to avoid situations where personal interests conflict or appear to conflict with the State Officer's or public officer's official duties. This includes awarding of contracts to a pension scheme, company, partnership, or entity where the public officer may have conflict of interest.

iv. Each IPP licensee is expected to promptly notify the Board/Commission in writing in case of a change in the composition or structure of the shareholding of the licensee affecting the original or subsequent subscribers to the licensee's Memorandum of Association or any transaction with the effect of making a single person control five percent (5%) or more of the voting power at any general meeting of the licensee. KPLC should work with EPRA to identify the BOs of the IPPs based on the information that was provided when either of these events occurred within the IPPs.

1.6.7 Impact of additional PPAs to any tariff increase should be thoroughly assessed. While KPLC needs to operate as efficiently as possible - for example, through loss reduction programs on its electricity distribution network, it is also critical that the regulatory and tariff framework supports its position as a credible off-taker to enhance sector credibility.

CPA Nancy Gathungu, CBS
AUDITOR-GENERAL

Nairobi

29 June, 2023

2. Methodology, Approach & Limitations

2.1. Methodology for the Assignment

As highlighted under Executive Summary section, having reviewed the terms of reference for this assignment, we structured our approach into six (6) core areas.

Table 1: Task per Workstream and where they are Covered.

	Workstream	Coverage	TORs addressed	Where covered
	Workstream 1: Applicable Laws and Regulations	Compliance to the applicable laws and regulations in place during the procurement of the IPPs.	TOR 01, 03, 06, 16, 17	Reports 2, 3 and 4
	Workstream 2: IPP Selection Criteria, Events Chronology and Summary of Procurement Findings	The process followed in procuring and selecting the IPPs and approvals sought and granted.	TOR 01, 02, 15, 17	Report 3 and 3A
	Workstream 3: Conditions Precedent on PPAs	Fulfilment of the Conditions Precedent (CPs) outlined in the PPAs.	TOR 01, 17	Report 4
	Workstream 4: Beneficial Ownership and Contractors Used	IPP background checks to confirm beneficiary owners and identification of the contractors and subcontractors used by the IPPs.	TOR 07, 08, 17	Report 5
	Workstream 5: Operational Review	Performance of the IPPs vis-à-vis requirements per the PPA and KPLC power despatch requirements and the processes in place to monitor and manage the IPPs.	TOR 03, 05, 11, 12, 13, 17	Report 6
	Workstream 6: Financial Review	Assessment of the financial modelling practice and how models have been subsequently applied, Value for Money (VFM) and financial statements review.	TOR 04, 09, 10, 14, 17	Report 7

In the Index of Annexures and Appendix 4, we have summarised the documents received and reviewed, and the persons interviewed to inform this report and its constituent parts (Report 2 through to Report 7 as indicated above).

Each of these areas were examined across three lenses that enabled us to yield a holistic view of the PPA with the operations that can empower the decisions makers in KPLC.

Compliance Fraud Examination Risk Identification

Confirming whether the processes and operations are being conducted in line with the applicable laws, regulations, policies, and guidelines.	*Identification of red flags that point to fraud, irregularities in the processes and operations or other form of malpractices.*	*Identification of areas of the above processes and operations that are susceptible to irregularities and recommendations for mitigation.*

Lenses

Our methodology is summarised below:

2.2. Undertaken activities.

We undertook the following activities during the review:

2.2.1. Applicable Laws and Regulations

Specific Terms of Reference Covered

TOR 1: Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable laws and /or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes.
TOR 3: Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).
TOR 6: Establish whether the roles played by various actors of the energy sector were in line with their respective mandate and applicable procurement laws.
TOR 16: Assess the effectiveness and application of the respective control and oversight by KPLC and identify weaknesses which impede good performance, for example, adequacy of resources, lack of equipment and competence and identify potential areas of improvement on the oversight role.

Table 2: Procedures undertaken under applicable laws and regulations.

Procedures Undertaken
1. Reviewed the relevant procurement laws and regulations, government circulars, and other applicable laws such as the Exchequer and Audit (Public Procurement) Regulations, 2001, PPD Act 2005, PPD(PPP) Regulations 2009, National Public Private Partnerships (PPP) Policy Statement of 2011, PPP Act 2013, and PPP Regulations applicable during the periods when the IPPs were procured.
2. Reviewed the relevant energy laws, regulations, policies, and government circulars such as the Electric Power Act, Energy Act, 2006 and Feed-in-Tariff (FiT) Policy applicable during the periods when the IPPs were procured.
3. Mapped the roles played by actors (KPLC Management and Board, the National Treasury / Ministry of Finance, Ministry of Energy, ERC/ERB, among others) and assessed whether they were in line with their respective mandates as required under the procurement and other relevant laws mentioned above.
4. Obtained an understanding of KPLC department structure involved in the monitoring and management of IPPs, its composition, and the roles of the various personnel therein.

	Reviewed the policies and procedures to guide the activities of the department in exercising oversight over the PPAs.
5.	Identified the controls over KPLC's oversight of the PPAs and assessed whether the controls were adequate and operating as intended.
6.	Identified instances of non-compliance with the relevant laws, policies, and circulars, control gaps and provided appropriate recommendations, if implemented, will help KPLC mitigate irregularities in the procurement of PPAs with IPPs.

2.2.2. IPP Selection Criteria, Events Chronology and Summary of Procurement Findings

Specific Terms of Reference Covered

TOR 2: Establish the selection criteria used to identify the eventual IPP in each instance.
TOR 15: Assess whether there is malpractice in the procurement of IPPs and: (i) Determine whether there was any fraud; (ii) Assess the extent of fraud; (ii) Establish the modus operandi of the fraud scheme; (iv) Quantum of the loss/damage to KPLC because of the fraudulent and corrupt acts; (v Identify the culpable/responsible persons and parties.

Table 3: Procedures undertaken under IPP Selection Criteria, Events Chronology and Summary of Procurement Findings

Procedures Undertaken	
1.	Reviewed the PPAs and their respective tender documentation, key supporting documentation, board circulars and minutes to understand the procurement process used to identify the eventual IPP contract.
2.	Assessed the applicable approvals by the KPLC Board, Government Ministries, the Energy Regulatory Board or Energy Regulatory Commission or EPRA.
3.	Assessed the compliance of the IPP procurement process with the requirements in the tender documents, relevant laws, policies, and circulars.
4.	Reviewed the contracting process to confirm that the form of the PPAs review and approval procedures, including any amendments therein, were done in accordance with the set policies and regulatory framework.
5.	Identified instances of non-compliance with the relevant laws, policies and circulars and provided appropriate recommendations, if implemented, will help KPLC mitigate irregularities in the procurement of PPAs with IPPs.
6.	Examined the evidence collected to determine the insights that could be obtained.

Note: Based on reviews of the PPAs, none of the in scope IPPs procured steam. Therefore, this review did not cover steam procurement.

2.2.3. Conditions Precedent on PPAs

Specific Terms of Reference Covered

- TOR 1: Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable Laws and or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes.

Procedures Undertaken

1. Reviewed the PPAs and their respective tender documentation, key supporting documentation, board circulars and minutes to identify any changes (if any) made on the conditions precedent (CPs).
2. Reviewed relevant supporting documentation to confirm whether all conditions precedent to the PPAs were met in accordance with the provisions of the PPAs or waived.
3. Examined the evidence collected to determine the insights that could be obtained that could help identity exposures to non-compliance and irregularities.

Post Review Procedures Undertaken

4. Upon completion of the procedures (1) to (3) above, observations made were presented to KPLC for clarification.
5. We proposed specific actions that KPLC management should consider limiting the company's exposure, based on procedures (1) to (3) above. Refer to In Report 4: Conditions Precedent on PPAs, for the proposed specific actions.

2.2.4. Beneficial Ownership and Contractors and Subcontractors Used

Specific Terms of Reference Covered

- TOR 7: Identify the contractors and subcontractors that supported developers and sponsors for each PPA.
- TOR 8: Establish the beneficial owners of the respective power plants and establish any linkages which may result to a conflict of interest.

Procedures to establish the beneficial owners.

1. For each IPP, we performed background checks on the entities and the individuals associated with them by leveraging reputable open source and proprietary information sources.
2. For companies registered in Kenya, we obtained the official third-party search certificates of registration (CR 12) issued by the Registrar of Companies in Kenya and conducted file perusal to identify the company details, directors, and shareholders of the company.
3. For companies registered outside of Kenya, we obtained details of ownership from their official websites, financial reports, and company searches in their respective countries.

Procedures to assess potential conflict of interest.

We examined the information gathered with a special focus on identifying:

- The beneficial owners (Bos) of the respective power plants up to the thresholds required by the applicable laws.
- Any potential links that these entities may have with KPLC staff, Board Members, and other stakeholders in the Energy Sector.

Procedures to identify contractors and subcontractors.

Identification of the contractors and subcontractors for the IPPs was limited to our own research and industry insights, review of various documents associated with this forensic audit, internet searches from credible sources, including the IPPs websites as applicable and review of the availed agreements between the IPPs and other parties.

2.2.5. Operational review of the IPPs

Specific Terms of Reference Covered

TOR 3: Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).
TOR 5: Assess the tariffs applied and their conformity with tender documents and relevant laws and policies.
TOR 11: Establish whether extensions of various project timelines were in accordance with the applicable laws and regulations.

TOR12: Ascertain the capacity discharged by various plants in comparison with the expectation of the respective PPAs for at least the last 5 years.
TOR 13: Perform a comparative analysis of procurement costs of energy from the IPP plants and against KenGen together with the resulting generation tariff.
Procedures Undertaken

1. We reviewed the price structures of the PPAs for IPPs, including in-built adjustment factors, such as inflation.
2. We obtained an extract of the payments made to IPPs and KenGen and performed a comparison of payments made to the IPPs and to KenGen for the last 5 years, distinguishing between projects acquired through IPPs under the FiT regime and outside these arrangements. All costs, including deemed energy compensation payments were considered.
3. For the thermal power plants, we performed a compliance assessment to the HFO procurement process.
4. We performed a comparison of the project timelines as indicated in the initial and current PPAs and confirmed whether extensions or changes were in accordance with the applicable laws and regulations.
5. We carried out a performance assessment of the thermal power plants considering their contracted capacity and availability.

2.2.6. Financial review of the IPPs

Specific Terms of Reference Covered

- TOR 4: Evaluate the accuracy of the financial models supplied.
- TOR 9: Carry out an analysis of IPPs' audited accounts for at least the last 5 years to ascertain whether the key parameters are in line with the audited financial models provided for in the PPAs.
- TOR 10: By reviewing independently verified/verifiable information sources, ascertain whether at financial close, in the first year of commercial operations, and over the last 5 years, that the key financial and operational parameters are in line with the approved financial models submitted to Energy and Petroleum Regulatory Authority (EPRA) / Ministry of Energy (MOE) / KPLC and as provided for in the signed PPAs.
- TOR 14: Establish whether KPLC obtained value for money in the PPAs.

Table 4: Procedures undertaken under the financial review of the IPPs

Procedures Undertaken

1. For the IPPs that were required to provide the audited financial models, we reviewed the available financial models at the financial close and confirmed that they were aligned to the values included in the corresponding PPAs.
2. We enquired whether VFM assessments and financial risk assessments were conducted for each of the PPAs, and, where applicable obtained and commented on the outcome of the assessments and whether KPLC or any other party confirmed that the value from the PPAs was still in existence at financial close. Our review did not entail a VFM assessment of the PPAs.
3. We assessed the modelling practice against the standard practice and provided observations on gaps identified and implications thereof. We did not undertake audits of the financial models.

Specific Terms of Reference Covered

The result of executing the procedures under each of the six workstreams above fulfilled the following service item outlined in the terms of reference:

- TOR17: Make recommendations to improve risk allocation to KPLC/Government of Kenya (GoK) and reduction in fraud (if any), and various other actions geared towards improving the procurement of IPPs.

2.3. Approach to the Assignment

To operationalize the methodology above, we adopted the following approach that combined various methods of evidence collection to ensure we accurately represented the facts relating to each of the reviewed subject areas. This is illustrated below:



Interviews: We conducted interviews and consultations with relevant KPLC staff and third parties to obtain clarification on various matters, supplement the documentary evidence collated, and corroborate our findings. Refer to Index of Annexures for a complete list of all persons interviewed during this assignment.



Document Reviews: We reviewed all documentation deemed relevant to the assignment and provided information that was necessary to achieve the objectives that we set out to accomplish. Refer to Index of Annexures for a complete list of all documents relied on during this assignment.



Process Walkthroughs: Where it was essential to visualize and observe vital activities and where information provided through documents/interviews was not reliable, we undertook process walkthroughs of crucial processes involved in the PPA processes to obtain a more vivid understanding. This included process walkthrough at KPLC offices at Stima Plaza and the National Control Centre. Refer to Appendix 4 for a complete list of all persons interviewed.



Corporate Intelligence Procedures: Where deemed necessary, we conducted background checks on entities that were relevant to the assignment. This involved establishing the ownership of specific entities to identify aspects such as potential directorships by KPLC employees that may have posed conflicts of interest.



Data Analysis: Using information obtained, we conducted data analyses as a means of stratifying financial and non-financial information and identifying trends and patterns that either provided confirmation of facts established during the assignment or were indicative of irregularities to be pursued.

2.4. Limitations of this Report

2.4.1. Limitation of Scope

Our work constituted a forensic review which entailed review and analysis of documentation and other records available to us and the acquisition of information through interviews with representatives from KPLC and other relevant third parties, with a view of establishing the facts regarding a specific matter. Below, we outline the limitations encountered in the review per workstream.

2.4.1.1. Time period of PPAs and changes in various stakeholders

An overarching assignment limitation is that while the review period was for 5 financial years to 30 June 2021, review of the underlying information revealed that the procurement of the IPPs spanned a period of over 25 years, with the first IPP having been identified in 1996.

In the 25 years to 30 June 2021 there were numerous changes of Accounting Officers at KPLC, Executive Management teams and staff that oversaw or participated in the procurement and other PPA activities. In addition, there were various board changes within KPLC and in the key stakeholders in the energy sector that interacted with KPLC on the procurement and approval of the PPAs. These include key government officials, representatives, and teams at Ministry of Energy (MOE), ERB/ERC/EPRA, Ministry of Finance/National Treasury, Attorney General and Solicitor General Offices to mention but a few. A summary of the key stakeholders in the 25-year period is included in Appendix 2.

Due to the 60-calendar days timeframe (17 April 2022 to 25 June 2022) within which this assignment was required to be executed, it was not possible to engage all stakeholders to obtain further insights beyond the information that was availed through KPLC, on their practical challenges and opportunities as they executed their varying roles regarding the procurement and award of the 20 PPAs in scope for this assignment. Information and documentation not received or reviewed at the time of compiling this report have not been incorporated into this version of the document. These are summarised in Appendix 3.

2.4.1.2. Applicable Laws and Regulations

Limitation on procedures performed by MOE and FiT Committee

For IPPs identified under the Feed in Tariff (FiT) policy, there were several procedures undertaken from the submission of an Expression of Interest (EOI) to the Ministry of Energy (MOE), review and approval of the project together with the requisite documents by the FiT committee which comprised of representatives of the MOE, KPLC and the ERC through to the MOE approval and notification given to KPLC to negotiate the PPA with the IPP.

We did not review the compliance of the MOE, ERC with the FiT policy. Our review was restricted to the role KPLC undertook once it obtained the MOE's approval to commence PPA negotiations with the IPP. Refer to Appendix 4 of Report 2: Applicable Laws and Regulations, Stakeholder Roles and KPLC Oversight of PPAs where we shared information

request through a letter to OAG for adoption and transmittal to MOE. However, we had not received the requested information as of the time of compiling this report.

2.4.1.3. IPP Selection Criteria, Events Chronology and Summary of Procurement Findings.

In this section, instances of unavailability of documents to support the chronology of events is highlighted in Appendix 3.2 of this report.

2.4.1.4. Conditions Precedent on PPAs

Table 5: Limitations encountered in the review of Conditions Precedent (CPs) on PPAs

Limitations encountered in the review of conditions precedent
CPs are outlined in the PPAs executed between KPLC and the different IPPs. Changes to the CPs may be introduced as the PPAs are varied or amended over time. Achievement of a condition precedent is supported by signed documents such as leases, permits, agreements, licences, letters of support, letters of credit, instruments of approval among others. Our review of the CPs was therefore limited to the extent of: a) PPA versions availed for our review, from which we would identify the most updated CPs. Dates when CPs were achieved were evaluated against the target effective dates and the long stop effective dates on the most recent PPA version availed for our review. b) KPLC Board circulars and minutes availed to us for meetings where CPs were discussed and waived (if any). c) Signed documents availed for our review, to support fulfilment of CPs. Where such documentation was not availed, we could not verify if these conditions were met by the long stop effective date beyond which the PPA would have been considered lapsed. Appendix 3.3 below highlights the CPs where signed documents supporting fulfilment of the CPs were not provided or were partially provided as of the date of compiling this report.

2.4.1.5. Beneficial Ownership and Contractors and Subcontractors Used

Table 6: Limitations on the background beneficial owner searches

Limitations on the background and beneficial owner searches
The background and Beneficial Owner (BO) searches were conducted within the relevant applicable laws in the countries where the IPPs and their associated entities were registered. We noted that the IPPs were registered in different jurisdictions, including Kenya, United Kingdom (UK), Mauritius, British Virgin Islands (BVI), Guernsey, Netherlands, United Arab Emirates (UAE), and Canada. a) In Kenya, the ultimate beneficial ownership (UBO) threshold is 10%. In UK, BVI, Guernsey, Netherlands, UAE, and Canada, the beneficial ownership threshold is set at 25% of shareholding or more, while in Mauritius, the threshold is 20% of the shares or more. Therefore, our investigation of the BOs of the IPPs was limited to the above thresholds in the relevant jurisdiction, in accordance with the records maintained at the applicable registries. b) For companies registered outside Kenya, we noted that in certain instances, the information on beneficial ownership was restricted and only accessible to third parties under specific circumstances. In most cases this information, if available, could only be obtained based on an investigation or inquiry by public bodies. Therefore, we sought

Limitations on the background and beneficial owner searches
assistance from the Office of the Auditor General (OAG) in making the formal inquiries to the Registrar of Companies in the foreign jurisdictions. Our investigation was therefore limited to the extent of information received through the OAG. As at the date of compiling this report, no information had been received from the OAG. See Appendix 4 to 9 of Report 5: Beneficial Ownership and Contractors Used.
c) The extent to which the entities may have links with KPLC staff, Board Members, and other stakeholders in the energy sector was limited to the information obtained in the beneficial owner searches.
d) Identification of the contractors and subcontractors for the IPPs was limited to our own research and industry insights, review of various documents associated with this forensic audit, internet searches from credible sources, including the IPPs websites as applicable and review of the availed agreements between the IPPs and other parties. As the forensic audit did not include a contract and transactions review of each of the IPPs, we could not identify all the contractors and subcontractors for the IPPs during the PPA period. Additionally, for the contractors and subcontractors identified through our own research we did not verify whether the IPPs entered into contracts/agreements with them. We recommend conducting further research and verification to ensure the accuracy of the data.

2.4.1.6. Operational Review of IPPs

Table 7: Limitation of scope under operational review of IPPs

Limitations of scope under operational review
Price structures review
Our review of the price structures did not consider the actual prices included, nor all other aspects of the PPA with financial implications. For the energy to costs analysis, the following factors which would have an impact on the unit cost of energy for power plants were held constant: • **Construction dates and yields** – A comparison of the unit cost of energy should be made on similar contracts signed with KenGen and IPPs, on a similar date. The plants for which data was used in the analysis were constructed at different times. For example, KenGen's geothermal portfolio dates from as far back as 1981 while the portfolio's data has been compared with that of more recent geothermal plants and new assets constructed at a similar time to Orpower 4. Consideration would need to be taken for the potential for depreciated assets and different site yields for different geothermal developments. • **Concessional finance** – Unlike the private developers, KenGen finances its facilities using finances received from concessional donors. Access to such financing has an impact on the resultant tariff. • **Cost of capital** – With KenGen being a GOK owned entity and considering its access to finances received from concessional donors, potentially, KenGen would require a lower cost of capital than a private investor. • **Use of the plant** – Power generation plants are not always used for the same purpose. For example, the cost of a plant used to ensure system balancing and stability may differ to one used to meet peak demand. Comparing costs with a common load factor may facilitate comparison, though the difference will remain.
Energy – Cost Analysis

Limitations of scope under operational review

Limitations of the energy to costs analysis were:

- KenGen did not have operational solar plants in the period whose data would be compared with that of the IPP solar plants.
- Unlike KenGen wind plants, energy costs for IPP wind power plants were inclusive of Deemed Generated Energy (DGE).
- The nonfuel costs paid for energy procured in FY20 from Olkaria V (owned by KenGen) were not included in the schedules to the audited financial statements. The costs and the units of energy purchased were therefore not considered in the ratios for FY20.
- The nonfuel costs paid for energy procured in FY20 from Kipevu I (owned by KenGen) were not included in the schedules to the audited financial statements. The costs and the units of energy purchased were therefore not considered in the ratios for FY20.
- On KPLC's audited financial statements, the non-fuel costs for KenGen's new Ngong wind power plant and the small hydro power plants were summed up and disclosed together. The new Ngong wind power plant was not considered under the wind power analysis section.
- Fuel costs paid in FY17, FY18 and FY19 for Kipevu I, Kipevu III, Muhoroni GT 1 and Embakasi GT 2 (all owned by KenGen and were operation in the period) were not included in the schedules to the audited financial statements. Analysis of fuel costs per unit of energy purchased was not performed for the four plants, in the three financial years.

HFO Procurement

- We identified the fuel suppliers for the thermal IPPs from the documents availed and performed a compliance assessment to the HFO procurement process for each where applicable. We could not determine whether there were additional fuel suppliers as our review was limited to the documents availed. For the identified suppliers where the HFO procurement documents were not availed we did not assess the IPP's compliance.

PPA Timelines Review

- We reviewed the project timelines indicated in the initial PPAs and compared them against the timelines indicated in the current PPAs. Where the current PPAs were not availed for our review, we did not perform the comparison. Further the timelines indicated in the PPAs required communication from the IPPs to KPLC upon achieving certain milestones and others were defined in other documents for instance the construction programs. Where the IPP communications and other documents were not availed, we did not determine the actual project timelines. Our review of whether the PPA timelines were met was limited to the information availed.

2.4.1.7. Financial Review of IPPs

The following limitations were noted under this workstream.

Table 8: Limitations of scope for the Financial Review

Limitations of scope for the Financial Review
a) Our review of the 20 IPPs in scope confirmed that only the PPA for Kipeto Energy Limited (Kipeto) had a requirement for the submission of an audited financial model to KPLC. Our review therefore focussed only on the review of the Kipeto financial model availed.
b) Our review of the 20 IPPs in scope confirmed that none had a requirement in the duly executed PPAs for the IPPs to provide audited financial statements to KPLC on an annual

Limitations of scope for the Financial Review
basis or as required. In addition, none of the IPPs is a listed entity either in Kenya or overseas making their audited financial statements not a matter of public access. We, therefore, did not undertake a review of any IPP's audited financial statements over a five-year period.
c) In view of the limitations above, we did not review independently verified/verifiable information sources, to ascertain whether at financial close, in the first year of commercial operations, and over the last 5 years, that the key financial and operational parameters were in line with the approved financial models submitted to Energy and Petroleum Regulatory Authority (EPRA) / Ministry of Energy (MOE) / KPLC and as provided for in the signed PPAs.
d) We requested for, through the Office of the Auditor General (OAG) but did not obtain, as at the date of compiling this report, the Value For Money (VFM) and financial risk assessment reports that were received and reviewed by the Public Private Partnerships (PPP) Directorate at the National Treasury which informed their approval to KPLC to enter negotiations with the IPPs for the eventual PPA entered. We also did not receive the confirmation from the PPP Directorate that Value for Money (VFM) was confirmed at financial close for respective PPAs approved.

2.4.2. Applicable Accounting Standards

Our work constituted a forensic audit which entailed the acquisition of information through interviews with representatives from KPLC and other relevant third parties, as well as the review and analysis of documentation and other records availed to us to establish the facts against an agreed set of objectives. The work performed as per the Letter of Engagement / Contract did not constitute a statutory audit, and therefore, we do not express an audit opinion in accordance with the International Standards of Auditing.

2.4.3. Totality of information

In the circumstances where we could not obtain adequate documentation, one should not rely on our work and our report as being comprehensive, as we may not have become aware of all facts or information that one would consider relevant. Assumptions made during the assignment have been set out under the appropriate sections of the relevant reports and are designed to be prudent and objective. The report is based on the facts established from documents provided and/or information obtained during this assignment. Information and documentation requested and not received and therefore not reviewed at the time of compiling this report have not been incorporated into this version of the document. These are summarised in Appendix 3.

2.4.4. Expression of a legal opinion

Although the work performed incorporates our understanding of the law as it stands, we do not express a legal opinion on any issue but merely state the facts as they have come to our attention. Any discussion of the relevant laws is intended solely to serve as a backdrop for the discussion and application of the relevant facts of the matter. It should be noted that where we do not comment on matters of law, these should be referred to your legal advisors.

2.4.5. Distribution of the Report

Only our signed final report constitutes our findings. Draft reports are submitted for discussion and comment only. It is the sole responsibility of the Office of the Auditor General and KPLC that this report is utilized only for the purpose as determined by them and/or their legal counsel. We do not accept any responsibility to third parties for breaches of this obligation or any opinion expressed, or action taken because of the information included in this document.

3 Summary Findings and Recommendations

3.1. Applicable Laws and Regulations

As indicated in Section 1.2.1 above, this workstream looked to fulfil the following terms of reference:

TOR 1: Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable laws and /or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes.
TOR 3: Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.1 above of this report.

The tables below summarise the applicable procurement laws, energy sector laws and regulatory authorities for KPLC in the 25-year period to 30 June 2021.

3.1.1. Applicable Procurement Laws for KPLC from 1996 to 2023:

Table 9: Applicable Procurement Laws for KPLC from 1996 to 2023

Period	List of Laws
Before 2001	• Procurement per GOK circulars before 2001.
2001 to 2005	• Exchequer and Audit (Public Procurement) Regulations, 2001(Repealed).
2005 to 2015	• Public Procurement and Disposal Act, 2005 (Repealed). • Public Procurement and Disposal Regulations, 2006 (Repealed).
	• Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009, Legal Notice No. 38 of 2009 (Repealed).
2015 to Present day	• Public Procurement and Asset Disposal Act, 2015. • Public Procurement and Asset Disposal Regulations, 2020.

3.1.2. Applicable Procurement Laws through the Public Private Partnership (PPP) Model

Table 10: Applicable Procurement Laws through the Public Private Partnership (PPP) Model

Period	List of Laws
2011 to 2013	The National Policy on Public-Private Partnerships, 2011 (the Policy)
2013 to 2021	The Public-Private Partnerships Act, 2013 [Repealed]
2021 to present day	The Public Private Partnership Act, 2021

3.1.3. Applicable Energy Sector Laws

Table 11: Applicable Energy Sector Laws

Period	List of Laws
1920 – 1996	Electric Power Act, Chapter 314 (Repealed)
1997 – 2005	Electric Power Act, Act No. 11 of 1997
2006 – 2018	Energy Act, No.12 of 2006 The Energy (Electricity Licensing) Regulations of 2012
2019 - Present day	Energy Act, No. 1 of 2019

3.1.4. Applicable Regulatory Authorities

Table 12: Applicable Regulatory Authorities

Period	Regulatory Authority
1920 to 1996	Ministry of Energy (MOE)
1997 – 2005	Electric Regulatory Board (ERB)
2006 – 2018	Energy Regulatory Commission (ERC)
2019 - Present day	Energy and Petroleum Regulatory Authority (EPRA)

We based our review purely on the above-listed statutes and regulations. The repealed legislations were reviewed for the sole purpose of unearthing the applicable procurement procedures that KPLC was required to comply with in procuring the IPPs entered when the legislation was in force.

Our review was limited to matters of Kenyan laws, and we express no opinion with respect to the laws of any other jurisdiction.

3.1.5. IPP Procurement Methods and the Applicable Laws and Regulations

The different procurement methods used to contract the 20 IPPs in scope for this assignment are as summarised below:

Table 13: IPP Procurement Methods and the Applicable Laws and Regulations

Period	Prevailing legislation	Impacted IPPs	Procurement method
Before 2001	Procurement per GOK circulars before 2001	• Iberafrica • Orpower	Procurement per GOK circulars before 2001 – Invitation to bid.
2001 to 2005	Exchequer and Audit (Public Procurement) Regulations, 2001(Repealed).	• None	N/A
2005 - 2015	• Public Procurement and Disposal Act, 2005 (Repealed).	• Rabai • Triumph, Gulf, Thika	Competitive tendering

Period	Prevailing legislation	Impacted IPPs	Procurement method
	• Public Procurement and Disposal Regulations, 2006 (Repealed).	LTWP (2007)[1]	Single sourcing of an unsolicited proposal to GOK
	• Public Procurement and Disposal (Public Private Partnerships) Regulations, 2009, Legal Notice No. 38 of 2009 (Repealed).	• PTSL • Regen-Terem • Imenti • Kipeto	Unsolicited proposals to MOE under Feed in Tariff
	Procurement under PPP Act, 2013 between 2013 and 2015	• Cedate • Malindi • Selenkei • Metumi • Gura, • Chania • Strathmore • HPSPL • Biojoule	Unsolicited proposals to MOE under Feed in Tariff
2015 to Present day	• Public Procurement and Asset Disposal Act, 2015. • Public Procurement and Asset Disposal Regulations, 2020.	• None	N/A

3.1.6. Compliance with applicable Laws and Regulations

3.1.6.1. Procurement per Government of Kenya circulars before 2001

Any procurement for works undertaken by KPLC or the MOE before 2001 were commissioned through National Treasury Circulars. KPLC was required comply with the relevant circular allowing for the invitation of tender and ensure the approval of the relevant tender board was obtained before the award of the contract.

The two IPPs procured before 2001 were Iberafrica and OrPower Inc. Both were procured through the competitive tendering procurement method.

3.1.6.2. Iberafrica PPA Procurement Process

KPLC sent out invitations (Annexure 3.1.6.1) to 15 firms to bid for a 30-50 Megawatts (MW) generating plant on 27 February 1996. Out of the 15 firms, 9 firms submitted their bids which were

[1] LTWP is classified as one of the projects before the PPP Act, 2013 on the PPP Directorate website. KPLC had started negotiation with LTWP before the enactment of the PPD (PPP) Regulations in 2009. Criteria used by KPLC and ERC to evaluate LTWP project are not apparent, as documentation availed only speaks to negotiations which culminated in KPLC Board approval on 4 November 2009. The procurement of LTWP did not follow any applicable regulation, and was therefore, not assessed against any law.

opened on 30 April 1996. Tenderers' representatives who attended the opening meeting signed off against the minutes/attendance sheet (Annexure 3.1.6.2).

Being the first IPP project, KPLC single sourced Mott Ewbank Precee (MEP) to review the bids (Annexure 3.1.6.3 – Annexure 3.1.6.5). MEP, in its report (Annexure 3.1.6.6), noted that the tender did not have a defined evaluation procedure. MEP, therefore, is indicated to have adopted a methodology widely used in the industry then and advocated by institutions such as the World Bank and other lenders to evaluate the bidders.

All the 9 bids were subjected to a screening process and economic analysis. Only three bids from Sabah Shipyard, Iberafrica and Stewart & Stevenson were accompanied by the required tender bond and subjected to a technical review and financial review. However, it is unclear how the three scored technically and the criteria used for the technical review.

The financial evaluation was carried out on a kilowatt-hour (KWh) basis since the proposals were of different capacities and energy availability. The results are summarised below:

- Sabah Shipyard Limited – UScts/KWh 7.984
- Iberafrica Limited - UScts/KWh 10.604
- Stewart & Stevenson- UScts/kWh 11.18

The two lowest bidders - Sabah Shipyard Limited and Iberafrica - were invited for negotiations.

The board, in a meeting on 13 August 1996 (Annexure 3.1.6.1), approved the contract award to Westmont (not under scope for this review) and Iberafrica Limited for supplying 30-50 MW generating plants. Documentation with the basis under which the two companies were awarded the contract was not availed.

Refer to Report 3: IPP selection criteria, Events Chronology for a detailed write-up on how Iberafrica was procured.

3.1.6.3. OrPower PPA Procurement Process

The MoE, in 1995, advertised internationally for bids from interested private developers for the Olakaria geothermal project. Out of the five companies invited to bid, the two companies below were indicated to have submitted their bids:

1. CalEnergy Company, Inc, Omaha, Nebraska, USA
2. Ormat International, Inc, Sparks, Nevada, USA

The bids were subjected to a technical, commercial, and financial evaluation.

On the technical evaluation, CalEnergy and Ormat scored 137 and 116 points out of 180, respectively.

The tender specifications requested bidders to give the price for fixed capacity to cover the investment costs and energy costs to cater for lubrications, operations, and maintenance. Per the circular 5435 (Annexure 3.1.6.7), Ormat's bid was indicated as fully compliant with the RFP, being a 64MW plant on the Olkaria III site, while CalEnergy's bid was indicated to be not compliant, being a 128MW for power generation based on the Olkaria III site and Olkaria II project whose financing arrangement under public sector implementation had advanced.

The overall price per KWh at 90% load factor quoted was CalEnergy(128MW) - 8.49 UScts/kWh and Ormat (64MW) - 10.59UScts/kWh.

From a commercial evaluation perspective, both companies were assessed to be large, as evidenced by their annual reports. Since the two proposals were for different projects, they were indicated as not directly comparable Although CalEnergy prices were low (8.49 UScts/KWh), the proposal was indicated as non-compliant with specifications, as it included Olkaria II and, therefore, disqualified. Ormat was invited for pre-award negotiations.

MoE and KPLC, assisted by MEP (the same consultant who reviewed Iberafrica bids) negotiated with Ormat between mid-1997 and December 1997.

Evidence of approval of the award was not availed. However, circular 5527 dated 2 November 1998 (Annexure 3.1.6.8) requested the Board to ratify management's actions in awarding the Olkaria III IPP project to OrPower.

Refer to Report 3: IPP selection criteria, Events Chronology for a detailed write up on how OrPower was procured.

3.1.6.4. Single sourcing of unsolicited proposal from Lake Turkana Wind Power (LTWP)

LWTP is indicated to have submitted an unsolicited proposal to the Government of Kenya (GOK) in 2007 (Annexure 3.1.6.9). The MoE subsequently instructed KPLC to negotiate a PPA with LTWP for the sale and purchase of energy to be generated from the 300MW wind plant. The LTWP proposal was not availed.

KPLC Management presented a paper to the Board in January 2009 (Annexure 3.1.6.10) requesting approval of the LTWP project. This was after the KPLC IPP Committee and LTWP had negotiated and agreed on a 20-year PPA at an energy tariff of Euro cents 7.22/kWh of which Euro cents 6.274 /kWh would be non-escalable and Euro cents 0.946/kWh escalable.

Circular 71/09 (Annexure 3.1.6.11) states that on 22 May 2009, the Ministry of Finance (MoF) informed MOE that there was no need for the Cabinet approval of the LTWP project and other projects, as the undertaking of the project would not entail any policy change and KPLC had been procuring the IPP. The circular indicates that MOE opined that the appraisal criteria conducted by KPLC, and ERC would suffice for the project. Subsequently, MOE and MOF mandated KPLC to proceed with the implementation of LTWP in a letter dated 25 May 2009 (Annexure 3.1.6.12) and 03 June 2009 (Annexure 3.1.6.13) respectively.

Per the regulatory review, the enactment of the PPD (PPP) Regulations in 2009 ushered in the regulatory framework that guided the procurement of IPPs through the PPP model. As indicated above, KPLC had started negotiation with LTWP before the enactment of the PPD (PPP) Regulations in 2009. Criteria used by KPLC and ERC to evaluate LTWP project are not apparent, as documentation availed only speaks to negotiations which culminated in KPLC Board approval on 4 November 2009 (Annexure 1.3.1.1).

Based on the above, the procurement of LTWP did not follow any applicable regulation, and was, therefore, not assessed against any law. LTWP, however, is classified as one of the projects before the PPP Act, 2013, on the PPP Directorate website.[2]

As indicated above, LTWP is classified as a PPP project initiated through an unsolicited proposal to MOE.

[2] https://www.pppunit.go.ke/project-before-ppp-act-2013/

3.1.7. Competitive tendering between 2005 and 2009

We assessed compliance of the procurement of the following IPPs against the following laws, which prevailed between 2005 and 2009 Public Procurement and Disposal Act, 2005 (Repealed[3])

- Public Procurement and Disposal Regulations, 2006 (Repealed)

Table 14: Summary of Compliance Check to Applicable Laws and Regulations (2005 to 2009)

Area of review	Compliance check to applicable law and regulations	Rabai	Triumph	Gulf	Thika
Internal Organization – Tender committee set up	A tender committee was set up to evaluate the bids and recommend the successful bidder (Annexure 3.1.7.1 – Annexure 3.1.7.4)	✓	✓	✓	✓
Tender committee	Requisite approvals were sought from the tender committee as provided in the Regulations[4]	✗	✗	✗	✗
Procurement method	Open tender used or other procurement procedure approved by the tender committee	✓	✓	✓	✓
Advertisement	The tender was advertised at least twice in a newspaper of general wide circulation* (Annexure 3.1.7.5 – Annexure 3.1.7.7)	✗ [5]	✓	✓	✓
International tendering	The requirements for international tendering were followed as prescribed in the regulation. (Annexure 3.1.7.8)	✓	✗ [6]	✗	✗

[3] As earlier indicated repealed legislations have been reviewed for the sole purpose of unearthing the applicable procurement procedures that KPLC was required to comply with in the procurement of the IPPs.
[4] Tender awards were approved by the Board (except for Gulf) and the Board's IPP committee (except for Rabai). Tender negotiations were carried out by the IPP committees and management.
[5] Evidence of the tender advertisement was not availed.
[6] Request for proposal for Triumph, Gulf and Thika were not availed.

Area of review	Compliance check to applicable law and regulations	Rabai	Triumph	Gulf	Thika
Tender opening	There was evidence of tender opening with particulars of those who submitted their bids and representatives who attended. Tender opening minutes signed. (Annexure 3.1.7.9 – Annexure 3.1.7.12)	✓	✓	✓	✓
	Tender opening committee appointed by the Accounting Officer[7]	✗	✗	✗	✗
Tender evaluation	Tenders were evaluated and compared using the procedures and criteria set out in the tender documents.[8] (Annexure 3.1.7.13)	✓	✗	✗	✗
	The successful tender was the tender with the lowest evaluated price.	✓	✓	✓	✓
IPP Eligibility	KPLC confirmed the eligibility of successful bidders per the set criteria before awarding a contract.	✗	✗	✗	✗
Notification of Award	KPLC notified the successful tenderer and other unsuccessful persons who had submitted their tenders. (Annexure 3.1.7.14)	✗	✗	✓	✗
	KPLC entered a written contract with the successful IPP based on the tender documents after at least fourteen days have lapsed.	✗	✗	✗	✗
Contract amendments and variations	Contract amendments complied with the prescribed price or quantity variations for goods and were approved by the KPLC tendering committee.[9]	✗	✗	✗	N/A
	Any variations to contracts issued by KPLC with respect to IPPs complied with the thresholds provided in the Regulations. (Annexure 3.1.7.15 – Annexure 3.1.7.18)	✓	✓	✓	N/A

The following 13 IPPs PTSL, Imenti, Kipeto, Cedate, Malindi, Selenkei, Metumi, Gura, Chania, Strathmore, HPSPL, Biojoule, Regen-Terem were indicated in the various documents reviewed to have been procured under the Feed in Tariff (FiT) policy. The respective proposals were submitted to Ministry of Energy (MOE). The MOE's FiT Committee was required to review and approve the Expression of Interest (EoIs), and the subsequent proposal, feasibility studies and overall approval of the project. Our review was restricted to the role KPLC undertook once it obtained the MOE's approval to commence PPA negotiations

[7] Evidence of appointment of the tender opening committee by KPLC MD was not availed.
[8] RFP for Triumph, Gulf and Thika were not availed.
[9] PPA amendments were approved by the KPLC Board (**Annexure 3.1.7.19 – Annexure 3.1.7.23**)

with the IPP. As indicated in Report 2: Applicable Laws and Regulations, Stakeholder Roles and KPLC Oversight of PPAs, we sought, among others expression of interests and proposals submitted by IPPs and corresponding Ministry approvals but did not receive the requested information as of the time of compiling this report. This request was through a letter to OAG for adoption and transmittal to MOE (Annexure 3.1.7.24).

The above notwithstanding, we further reviewed the 13 IPPs above against the Public Procurement and Disposal (Public Private Partnerships) (hereafter referred to as "PPD(PPP)") Regulations, 2009 and the PPP Act, 2013. The key areas where documentation was not availed to confirm compliance with these regulations and law are as follows:

3.1.8. Procurement under PPD(PPP) Regulations, 2009 model between 30 March 2009 to 8 February 2013

The National Policy on PPP was published in November 2011. However, PPD(PPP) Regulations, 2009 took precedent. Therefore, procurement of IPPs from 30 March 2009 was to 8 February 2013 - when the PPP Act, 2013 came into effect - were assessed based on the regulations. This applied to PTSL, Regen-Terem, Imenti, and Kipeto.

Table 15: Summary of Compliance Check to Applicable Laws and Regulations (2009 to 2013)

Area of review	Compliance check to applicable law and regulations	PTSL	Regen-Terem	Imenti[10]	Kipeto
PPP Arrangements	IPPs complied with the set schemes[11] and a competitive bidding process was undertaken to arrive at the successful IPP.	✗	✗	✗	✗
PPP steering committee approval	Power projects were approved by the PPP steering committee.[12]	✗	✗	✗	✗

[10] The MOE is indicated to have received the feasibility study in February / March 2009 (**Annexure 3.1.8.1**)

[11] The schemes include Management contract; Lease arrangement; Concession for a period not exceeding thirty years; Build-Own Operate-Transfer (BOOT) scheme; Build-Own-Operate (BOO) scheme; and such other schemes as prescribed by the PPP Steering Committee and approved by the Cabinet. Evidence of the same was not availed.

[12] MOE approved the PTSL, Regen-Terem, and Kipeto (**Annexure 3.1.8.2 - 3.1.8.4**). Imenti is indicated to have been approved by the FiT committee (**Annexure 3.1.8.1**). Evidence of approval by the PPP Steering committee was not availed for all.

Area of review	Compliance check to applicable law and regulations	PTSL	Regen-Terem	Imenti[10]	Kipeto
Unsolicited bids	Requisite conditions were met before awarding unsolicited bids.[13]	✗	✗	✗	✗
Contracting PPP agreements	KPLC obtained PPP Steering Committee approval before entering into the PPP agreement.[14]	✗	✗	✗	✗
Minimum Contractual Obligations	The PPA contained the defined minimum contractual provisions. (Annexures 1.3.6.9, 1.3.6.10, 1.3.6.14 and 1.3.6.17)	✓	✓	✓	✓
Government Letter of Support (LOS)	LOS were only issued upon recommendation of the Steering Committee and approved by the Minister of Finance and would be dependent on Cost-Benefit.	LoS not required			✗[15]
Variations and amendments of PPP agreements	Any variations or amendments to PPP agreements were approved by the PPP Steering Committee was obtained.	Now PPA variations	✗[16]	Now PPA variations	

Triumph was noted to have been progressed to financial evaluation despite not entirely being technically responsive (Annexure 3.1.8.5). The tender evaluation committee was not involved in the approval of the PPA. The PPA was instead approved by the KPLC Board (Annexure 3.1.8.6).

3.1.9. Procurement under PPP Act, 2013 between 2013 and 2015

Per the Transitional Provisions of the PPP Act, 2013 under Section 73, "Any regulations in force immediately before the commencement of the PPP Act and applicable to PPPs would be deemed revoked at the commencement of the PPP Act (on 8 Feb 2013)". This meant that the PPD (PPP) Regulations, 2009 were revoked with the coming into force of the PPP Act.

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[13] The feasibility studies or bids submitted were not availed.

[14] PPP were approved by the KPLC Board (**Annexure 3.1.8.7 - 3.1.8.10**). However, evidence of PPP steering committee approval was not availed.

[15] Evidence of the LOS recommendation by the PPP steering committee and the rationale thereof was not availed.

[16] PPP steering committee approval of the amendments to the PPA was not availed.

We evaluated the procurement of IPPs from 8 February 2013 against provisions of the PPP Act, 2013. Results of compliance tests with applicable laws were as follows:

Table 16: Summary of Compliance Check to Applicable Laws and Regulations (2013 to 2015)

Area of review	Compliance check to applicable law and regulations	Cedate	Malindi	Selenkei	Metumi, Gura, Chania	Strathmore	HPSPL	Biojoule
PPP Committee approval	KPLC sought approval from the PPP Committee before towards entering in a PPP arrangement[17]	✗	✗	✗	✗	✗	✗	✗
PPP Nodes	The PPP project was prepared and implemented by the PPP Node (KPLC). The Node was responsible for updating and maintaining all records of PPP projects.[18]	✗	✗	✗	✗	✗	✗	✗
PPA Execution	All PPAs entered are executed by the KPLC Accounting Officer (MD & CEO) (Annexures 1.3.6.8, 1.3.6.11, 1.3.6.12, 1.3.6.13, 1.3.6.15, 1.3.6.16, 1.3.6.18, 1.3.6.19 and 1.3.6.20)	✓	✓	✓	✓	✓	✓	✓
GOK Letter of Support	Government supported the projects by issuing a Letter of Support (Annexures 3.1.9.1 - 3.1.9.3)	✓	✓	✓	N/A	N/A	N/A	N/A

[17] There were PPP Committee approvals for Cedate, Malindi, Selenkei, Strathmore, and HPSPL after PPA execution (**Annexure 3.1.9.4 - 3.1.9.8**)
[18] The projects were procured at the MOE level. The KPLC had a technical committee to review and negotiate the PPA.

Area of review	Compliance check to applicable law and regulations	Cedate	Malindi	Selenkei	Metumi, Gura, Chania	Strathmore	HPSPL	Biojoule
Feasibility study	A feasibility study for the project was undertaken and approved by the PPP committee[19] (Annexure 3.1.9.10 - 3.1.9.20)	✓	✗	✓	✗	✓[20]	✓	✗
Bid solicitation	Bids were solicited in an open, transparent, fair, and effective process that results in value for money. [21]	✗	✗	✗	✗	✗	✗	✗
Privately Initiated Investment Proposals	PIIP conditions fulfilled	✗	✗	✗	✗	✗	✗	✗
PPA terms	The PPA includes specific obligations required by the PPP Act. (Annexures 1.3.6.8, 1.3.6.11, 1.3.6.12, 1.3.6.13, 1.3.6.15, 1.3.6.16, 1.3.6.18, 1.3.6.19 and 1.3.6.20)	✓	✓	✓	✓	✓	✓	✓
PPA amendment and variation	Amendment or variation to a PPA are not adverse to the KPLC, its objectives or goals, or the general tax-paying public.	A comprehensive legal review of the PPAs was outside the scope of this assignment. A summary of the variations made are however included in Report 3 and 4.					There were no PPA amendments or variations	

[19] For Cedate, Malindi, Selenkei, HPSPL, PPP committee approval was sought after the PPA had been signed. For Gura and Chania, feasibility studies were availed but the PPP Committee approvals were not provided. For Metumi and Biojoule, PPP committee approval and feasibility studies were not availed.
[20] Strathmore University feasibility study was availed but the PPP Committee approval was not provided.
[21] IPPs submitted unsolicited proposals.

Area of review	Compliance check to applicable law and regulations	Cedate	Malindi	Selenkei	Metumi, Gura, Chania	Strathmore	HPSPL	Biojoule
	All Amendments or variations to the PPA were approved by the PPP committee. [22]	✗	✗	✗	✗	✗		

[22] The KPLC Board approved any PPA amendments or variations.

3.1.10. Unsolicited Propsoals

As summarised in Section 1.3 above, out of the 20 IPPs in scope of this assignment, 14 were as a result of unsolicited proposals to the Government of Kenya (GOK).

According to the World Bank[23], unsolicited proposals allow governments to benefit from the knowledge and ideas of the private sector. However, how to respond to unsolicited bids to protect transparency in the procurement process and recognize the initiative of the proponent is typically difficult.

Below are some of the identified benefits and challenges of unsolicited proposals:

a) Benefits of unsolicited proposals.

Unsolicited proposals allow governments to benefit from the knowledge and ideas of the private sector. For example:

- Allow Governments to identify and prioritize projects, help overcome early-stage project identification and assessment challenges, and generate innovative solutions to infrastructure challenges.
- An appropriately designed unsolicited proposals process that allows private entities to propose project ideas that align with a government's infrastructure plan can harness the private sector's interest in developing commercially viable project solutions.
- Compliment the Government with skills they may not have, such as developing feasibility studies that reduce bottlenecks at an early stage of the PPP process.
- Help widen the range of potenrial solutions available to address infrastructure gaps.

b) Challenges of unsolicited proposals:

- Most PPPs require government fiscal support: the government typically accepts risks, and the associated contingent liabilities, even if direct subsidies are not needed. As described in the Public-Private Infrastructure Advisory Facility Toolkit for PPPs in Roads and Highways (WB 2009a, Module 5, Stage 3: "Procurement"[24]), experience suggests that proposals submitted by private companies often do not adequately assess the risks associated with the project, which may be borne by the government.
- Unsolicited proposals do not originate as part of a government planning process and, in some cases, by definition, are not part of sector plans. This raises the question of whether the service proposed is sufficiently integrated with other sector plans for demand and benefits to be robust to changing circumstances and priorities.
- Unsolicited projects may divert Government attention from a planned approach to infrastructure as a whole. In a government planning process, public agencies identify projects that respond directly to infrastructure plans and previously identified societal and economic needs. The primary motivation of a private entity submitting a project idea is to further its own interests, which may not be aligned with those of the government or society. The role of the government is to ensure that the proposed unsolicited proposal is structured to meet societal needs and can be tendered to ensure fair terms, conditions, and pricing.
- Negotiating with a project proponent based on an unsolicited proposal in the absence of a transparent or competitive procurement process can create problems. It could result in poor

[23] https://ppp.worldbank.org/public-private-partnership/benefits-and-pitfalls-unsolicited-proposals
[24] https://ppiaf.org/sites/ppiaf.org/files/documents/toolkits/highwaystoolkit/5/5-42.html

value for money from the PPP project, given a lack of competitive tension, or provide opportunities for corruption. Even if there are no clear indications of corruption, if a company is seen to benefit from a PPP without opening the opportunity to competitors, it can give rise to complaints about the fairness of the process. This lack of transparency can undermine the legitimacy and popular support for the PPP program.

3.1.11. Roles played by Stakeholders.

Under the Terms of Reference, we were required to:

TOR 6: Establish whether the roles played by various actors in the energy sector were in line with their respective mandates and applicable procurement laws.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.1 of this report.

The key stakeholders involved in the approval of procurement and contracting of PPAs by KPLC included the Ministry of Energy, Ministry of Finance, Regulator, Attorney General, and KPLC's Board, CEO and CS. Below were the roles and responsibilities for these key stakeholders:

3.1.11.1. Ministry of Energy/Ministry of Energy and Petroleum

Table 17: Role of Ministry of Energy in the approval of procurement and contracting of PPAs by KPLC

Period	Role in procurement and contracting of PPAs
1920 – 1996	• Authorise any person to generate electrical energy and to erect, operate, and maintain the power plant and works thereof. • Grant a bulk supply license to any public or local authority, or to any company, or person to supply electrical energy in bulk. • Approve the renewal of a bulk supply license issued to a licensee. • Approve the compulsory acquisition of land for purposes of a power generation station; and • Approve by-laws made by licensees which were to be observed by consumers of electrical energy - the by-laws would govern generally the supply, use, metering, methods of charge, and charges for electrical energy.
1997 – 2005	• Grant the final approval to a license submitted to it by the ERB based on the recommendations made by the ERB. • Impose civil fines on licensees who failed to comply with the conditions provided in the licenses. • Revoke licenses under specified circumstances
2006 – 2018	• On the recommendation of the ERC, enter upon and take possession of the undertaking of the licensee and operate the undertaking for and on account of the licensee for failure to meet their obligations under the Act. • Set the minimum requirements for approval of all contracts for the sale and supply of electrical energy. • Compulsorily acquire land on behalf of a licensee where it is in the public interest to do so.

Period	Role in procurement and contracting of PPAs
	• Promote the development and use of renewable energy technologies, including but not limited to biomass, biodiesel, bioethanol, charcoal, fuelwood, solar, wind, tidal waves, hydropower, biogas, and municipal waste; and • Formulate policy relating to the energy sector.
2019 to Present Day	• Oversee the Energy sector being the lead government ministry in charge of energy-related matters, and EPRA, the sector regulator. • Draft energy policies such as FiT policies and set the strategic direction for the growth of the Energy Sector including formulating a National Energy Policy that is to be reviewed every five years. • Develop an Integrated National Energy Plan (INEP) in consultation with stakeholders in electricity, renewable energy, and coal. In this respect, MoEP is to receive the plans for the provision of energy services from national energy service providers, county governments, and utilities. Additionally, the Cabinet Secretary of Energy may authorise any person to make surveys, investigations, tests, and measurements in search of geothermal resources.

As documented in Report 3: IPP Selection Criteria, Events Chronology, the MOE played various roles in the procurement and contracting of PPAs by KPLC. These included:

- Drafting and issuance of advertisements for EOI by international bidders for to be potential IPPs for specified plants. This was in the period to 1995 with KPLC subsequently issuing the advertisements in consultation with MOE.
- Directives to KPLC to procure various thermal plants and enhancements thereof in line with expected/projected energy demands.
- Guidance to KPLC Management and Board on various consultations on the execution of the PPAs terms and conditions.
- Part of the KPLC IPP Board Committee that reviewed and approved negotiated PPAs for onward submission to the full board and ERB/ERC/EPRA for approval. The Permanent Secretary (PS), MOE or his representative participated in these meetings including where letters from the MOE by either the MOE Minister or PS were discussed.
- Participation in KPLC full board meetings where PPAs were approved.

Finding
Per the applicable Laws and Regulations, the Ministry's role was not to initiate procurement of PPAs as is the case for OrPower where the MOE issued the EOIs (Annexure 3.1.6.7). The MOE was further indicated to have requested Iberafrica and Tsavo for capacity enhancement (Annexure 3.1.11.1) It was also not clear from the information reviewed, whether some of the guidance provided was unsolicited or solicited or was being issued as part of MOE's policy intervention mandate. Examples, which are documented in detail in Report 3A: Summary of Procurement Findings include: • Extension of term of the PPA with Iberafrica and reduction of capacity charges in 2004 (Annexure 3.1.11.2). • MOE request to Iberafrica and Tsavo for capacity enhancement in 2007 (Annexure 3.1.11.1) . • MOE PS conveyed OrPower's request to be paid a special tariff to the KPLC Baord in 2012 (Annexure 3.1.11.3). Documentation regarding whether OrPower was paid the special tariff was not availed.

- MOE PS guidance to KPLC in 2014 to engage in OrPower on the expansion of Olkaria III to 150MW (Annexure 3.1.11.4).
- MOE communication of cabinet approval of the LTWP project (Annexure 3.1.11.5).
- MOE PS proposal that KPLC absorbs US cents 3.00/kWh of the LTWP tariff, with the rest being passed through to customers (Annexure 3.1.11.6).
- MOE view on the potentially high burden of deemed generation payments to LTWP (Annexure 3.1.11.7)
- MOE guidance to KPLC to separate technical and commercial issues for Kipeto to commence the technical commissioning of the project (Annexure 3.1.11.8).
- Directive to revalidate lapsed PPA for Chania, Metumi and Gura (Annexure 3.1.11.9).

Recommendation

While, the government directives are not out of the norm, several examples arise in which the GOK and KPLC have placed greater risk on their own procurement processes due to weak structures of governance within Government and/or KPLC.

Inadequate corporate governance structures expose KPLC and the GOK to sub-optimal outcomes and can also undermine the credibility of the Kenyan market for international investors. To address these issues, it is crucial that the roles of all parties in the sector are clearly identified, that processes are designed and understood (e.g., for PPA approval), and that KPLC's Board has sufficient structures of accountability in place to safeguard the interests of its shareholders and customers.

3.1.11.2. Regulator- MOE/ERB/ERC/EPRA

Table 18: Role of MOE/ERB/ERC/EPRA in the approval of procurement and contracting of PPAs by KPLC

Period	Regulator	Role in procurement and contracting of PPAs by KPLC
1920 - 1996	MOE	• Grant the final approval to a license submitted to MOE by the ERB based on the recommendations made by the ERB.
1997 - 2005	ERB	• Review license applications and submit the same to the Ministry for final approval. • Set, review, and adjust tariffs for all persons who transmit or distribute electrical energy. • Investigate tariff structure even when no specific application for a tariff adjustment had been made.
2006 - 2018	ERC	• Regulating the importation, exportation, generation, transmission, distribution, supply, and use of electrical energy. • Protecting the interests of consumer, investor, and other stakeholder interests. • Monitoring, ensuring the implementation of, and the observance of the principles of fair competition in the energy sector, in coordination with other statutory authorities. • Issuance, renewal, modification, suspension, or revocation of licenses and permits for all undertakings and activities in the energy sector. • Prescribing the form and manner in which any application for a license or permit or amendment thereof or objection thereto shall be made, and the fees payable in respect of any such application.

Period	Regulator	Role in procurement and contracting of PPAs by KPLC
		• Making and enforcing directions to ensure compliance with conditions of licenses or permits issued under the Act. • Setting, reviewing, and adjusting electric power tariffs and tariff structures, and investigating tariff charges, whether a specific application has been made for a tariff adjustment. • Approving electric power purchase and network service contracts for all persons engaging in electric power undertakings.
2019 to Present	EPRA	• Issue and renew licenses and permits for all undertakings and activities in the energy sector. • Manage electric power tariffs and tariff structures. • Investigate tariff charges. • Approve electric power purchase and network service contracts for all persons engaging in electric power undertakings.

ERB/ERC/EPRA involvement in the procurement process of IPPs were largely in line with its mandate of issuing power generation licenses to IPPs and approved draft PPAs including the tariffs therein, prior to their execution by KPLC. Where there were subsequent amendments to the initial PPAs and ERB/ERC/EPRA approval sought, these were approved as summarised in Report 3: IPP Selection Criteria, Events Chronology.

3.1.11.3. Ministry of Finance

Table 19: Role of Ministry of Finance in the approval of procurement and contracting of PPAs by KPLC

Office	Role in Procurement and Contracting of PPAs
National Treasury- Cabinet Secretary and/or Permanent Secretary on behalf of GOK	• Where needed, the Government demonstrated its support for approved PPP agreements and its commitment to seeing them through by issuing a letter of comfort/support (LOS).
PPP Steering Committee	• A feasibility study for the project was undertaken and approved by the PPP committee. • KPLC to seek the approval of the Committee before it undertook the steps towards entering a PPP arrangement and adhered to the applicable standards, policies, and guidelines. • LOS were only issued upon recommendation of the Steering Committee and approved by the Minister of Finance and would be dependent on Cost-Benefit Analysis, national priorities, and available Government resources. • All amendments or variations to the PPA were approved by the PPP committee.

As summarised in Report 4: Conditions Precedent:

- GOK, through the National Treasury, issued LOS to IPPs where this was included as the conditions precedent (CP) in the executed PPAs and the CP was not subsequently waived.
- We sought for but had not obtained evidence, as of the date of compilation of this report, of the PPP Committee approval for any amendments or variations to the initial PPAs. Where evidence

of KPLC Board and ERB/ERC/EPRA approval of the amended or variated PPA was availed, this has been documented in Report 3: IPP Selection Criteria, Events Chronology and Report 4:Conditions Precedent.

- We sought for but had not obtained evidence, as of the date of compilation of this report, any PPP committee approvals of feasibility studies and other pre-requisite documents that prospective IPPs had to submit for review and approval, before KPLC was asked to negotiate with them respective PPAs.

Finding
The PPP committee approved financial risk assessment reports which were sought after the execution of the executed PPAs for Cedate, Malindi, Selenkei and HPSP (Annexures 3.1.9.11, 3.1.9.12, 3.1.9.14 and 3.1.9.20) . This was in non-compliance with the required procedure which required approval before execution of the PPAs.

3.1.11.4. Attorney General

As indicated in Report 4: Conditions Precedent, there were PPAs which included a Condition Precedent (CP) that a legal opinion has been obtained by the IPP from the Attorney General as legal counsel of the GOK (in a form acceptable to the IPP) confirming, inter alia, the validity of the GOK support letter and that the transactions contemplated therein on the part of GOK are in accordance with all applicable laws of Kenya.

Report 4: Conditions Precedent summarises the review of the legal opinion received from the Attorney General where applicable for an IPP and evidence obtained as of the date of compilation of this report.

3.1.11.5. KPLC

Designation	Role
Board of Directors	Responsible for approving the execution of the PPAs
IPP Board Committee	Responsible for reviewing PPA tender awards, the agreed terms in the PPA and recommend them to the Board for approval.
Accounting Officer (MD & CEO, KPLC)	No agreements were to be executed by an unauthorized party on behalf of KPLC. The law designated that function to the Accounting Officer.
Company Secretary	The company secretary signed off the PPA alongside the KPLC MD & CEO.
Tender Committee	Appointed by the Accounting Officer (KPLC MD/CEO), the committee reviewed tenders submitted and recommended award of tenders to successful IPPs.

As indicated in Report 3: IPP Selection Criteria, Events Chronology and Report 4: Conditions Precedent, for all the 20 IPPs in scope for the review, the PPAs (Annexure 1.3.6.1 - 1.3.6.20) were executed by the respective KPLC MD & CEO at the time.

3.1.12. Governance and oversight over PPAs

Under the terms of reference, we were required to:

TOR 16: Assess the effectiveness and application of the respective control and oversight by KPLC and identify weaknesses that impede good performance, for example, adequacy of resources, lack of equipment, and competence, and identify potential areas of improvement on the oversight role.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.1 of this report.

The roles, with respect to power purchase, for the Board, various Board Committees and the Power Purchase and Planning Division at KPLC are summarised in Report 2: Applicable Laws and Regulations, Stakeholder Roles and KPLC oversight of PPAs. These are summarised below:

- The Board -Its purpose and mandate are enshrined in the Board charter; with respect to PPA, it reviewed and approved all the PPAs KPLC enters with IPPs.
- Strategy and Innovation Committee of the Board (Previously IPP Committee) - The Committee's charter guides the Committee's activities and outlines its purpose and mandate, and terms of reference. It is comprised of 4 Directors and the MD. The Committee reviewed tender awards and the agreed terms in the PPA and recommends them to the Board for approval.
- PPA Review and Renegotiation Committee – The Committee was appointed through a gazettement notice No. 10723 dated 8 October 2021 (Annexure 3.1.12.1) and was mandated, among other things, to review of the PPA documents (both signed and unsigned), negotiating the PPAs, and handling all matters referred to the Committee with respect of power purchase. This Committee comprised of KPLC staff and staff drawn from other public sector entities, including KETRACO, EPRA, GDC, OAG, and KenGen. The term of this committee was for one year, or as may be extended, with effect from 10 December 2021. Per dicussion with KPLC management, there were no PPA negotiation conducted and concluded by this committee during its tenure.
- The Power Purchase and Planning Division - The PPP Division was established in 2021 following a recommendation by the Presidential Taskforce and internal input within KPLC for better management of power purchase from planning, PPA procurement to operations of power generation.

Our review of the KPLC board minutes and resolutions for the 25-year period to 30 June 2021 noted the following exceptions:

3.1.12.1. Instances where minutes highlighting Board approvals of the PPAs were not availed, or not signed, or were signed by the MD (and not the Board Chair as required) and/or Company Secretary or were signed after the PPA had already been executed.

3.1.12.1a Minutes of the KPLC Board Approvals that were not availed for review.

Table 20: Minutes of the KPLC Board Approvals that were not availed for review.

IPP	Minutes of the KPLC Board Approvals that were not availed for review
Iberafrica Power (EA) Limited	i. The minutes of the Board approval of the negotiated PPA - The signed PPA is dated 16 August 1996. ii. Circulars and Board approvals relating to the 1st supplemental agreement to the PPA dated 16 August 1996 - KPLC indicated that 1990 - 2001 Board Minutes had been taken by Ethics and Anti-Corruption Commission (EACC) and had not been returned yet, and therefore could not be availed for our review. The first supplemental agreement is dated 1 December 1997.

IPP	Minutes of the KPLC Board Approvals that were not availed for review
	iii. Circulars and the minutes of the Board approvals relating to the 2nd supplemental agreement to the PPA dated 16 August 1996 - The second supplemental agreement is dated 20 July 2000. iv. Minutes of the Board approval of the Third supplemental agreement to the PPA. v. Minutes of the Board approval of the waiver of low availability penalties and other charges.
OrPower 4 Inc	i. Minutes of the Board approval of the negotiated PPA - The signed PPA document shared is dated 5 November 1998. ii. Minutes of the Board approval of the 1st Supplemental Agreement to the PPA dated 5 November 1998. iii. The outcome of the negotiations of the Board Committee with OrPower4 on the final tariff and the minutes of the Board approval for the first amended and restated PPA. iv. The minutes of the Board approval for the Second Amended and Restated PPA. v. The minutes of the Board approval for the Third Amended and Restated PPA - The Third Amended and Restated Agreement is dated 26 November 2014. vi. The minutes of the Board approval for the Third Amended and Restated PPA – 1st amendment.
Rabai Power Limited	i. Board minutes for 1 August 2007 where Simba Energy Limited was awarded a contract for the development of an 80-90 MW. ii. The minutes of the Board approval of the negotiated PPA - The signed PPA is dated 27 February 2007. iii. Board approval for the Standby Letter of Credit (SBLC).
Power Technology Solutions Limited	i. The resolutions signed by the Board members approving the PPA.
Regen-Terem SHPP Limited	i. The minutes of the Board approval for the 1st Amended and Restated PPA, 2014.
Biojoule Limited	i. The minutes of the meeting where the ICT & PPA Committee and the Board approved the PPA.
Cedate Limited	i. The resolutions signed by the Board members approving the PPA.
Hydro Project Service Peters Limited	i. The resolutions signed by the Board members approving the PPA.
Kipeto Energy Limited	i. The minutes where the ICT & PPA committee of the Board, in its meeting held on 24 November 2014, recommended the PPA for approval by the Board.
Malindi Solar Group Limited	i. The minutes of the meeting where the ICT & PPA Committee approved the PPA. ii. The resolutions signed by the Board members approving the PPA.
Selenkei Investments Limited	i. The resolutions signed by the Board members approving the PPA.

IPP	Minutes of the KPLC Board Approvals that were not availed for review
Chania Power Company, Metumi Power Company, and Gura Power Company Limited	i. The minutes of the Board approvals of the negotiated PPAs.

3.1.12.1b Board Minutes that were not signed and therefore their factuality inconclusive.

Table 21: Board Minutes that were not signed and therefore their factuality inconclusive.

IPP	Board Minutes that were not signed.	Referenced Document
Iberafrica Power (EA) Limited	i. The document reference no. PP.6.75.5 with a summary of the tender invitation and evaluation which indicated that the Board held a meeting on 13 August 1996 and approved the contract award to Westmont and Iberafrica Limited for the supply of generating 30-50 MW generating plants. The document was not dated or signed. However, it indicated the name of the KPLC MD, Samuel Gichuru, at the end. ii. Extracts of the minutes of the special Board meeting held on 24 August 2007 where it was noted that the IPP Board Committee had been in negotiation with Iberafrica on the charge rates and other principal issues on the proposal for the development of an additional 50MW power generating plant. iii. Board meeting minute extract referring to BM/7/08 and BM/13/08 which indicated that members sought to know the progress made towards handing over the vacant parcel of two acres of land at Nairobi South storage yard to Iberafrica to facilitate the commencement of construction of the 50MW plant.	i. Document referenced as PP.6.75.5 (Annexure 3.1.6.1) ii. Extracts of the minutes of the special Board meeting held on 24 August 2007 (Annexure 3.1.12.2) iii. Extracts of minutes of the Special Board meeting held on 14 March 2008 (BM.20.08) (Annexure 3.1.12.3)
OrPower 4 Inc	i. Extract of the special Board meeting on the Enhancement and renewal of the Standby Letter of credit (SBLC) for the OrPower4 security arrangement, held on 21 January 2009.	i. Extracts of the minutes of the special Board meeting held on 21 January 2009

IPP	Board Minutes that were not signed.	Referenced Document
	ii. The extract of Board meeting minutes dated 7 September 2016, where circular 48/16 was discussed, stating that the First Amendment of the Third Amended and Restated Agreement is dated 30 October 2015. iii. The extract of Board meeting minutes dated 7 September 2016, where circular 48/16 was discussed, stating that the Board, under BM No.94/16 approved the reconfiguration of Olkaria III geothermal project.	(Annexure 3.1.12.4) ii. Extract of Board meeting minutes dated 7 September 2016 (Annexure 3.1.12.5) iii. Extract of Board meeting minutes dated 7 September 2016 (Annexure 3.1.12.5)
Rabai Power Limited	i. Board minutes for the meeting held on 3 August 2007, where it was indicated that on 1 August 2007, the Board resolved to award a separate contract for the development of an 80-90 MW power generating plant to Simba Energy. ii. Board minutes for the meeting held on 3 August 2007 where the Chair - Dr. Crowther Pepela, explained that the purpose of the meeting was to give an opportunity to some members of the Board who had concerns over the resolution made by the Board on 1 August 2007, to award a contract for development of an 80-90 MW power generating plant to Simba Energy on the legality of the procurement process. iii. Board meeting minutes extract of a special Board meeting held on 24 September 2007, where PS Patrick Nyoike was in attendance and letters from the PS, MoE dated 20 September 2007, and from the PS, National Treasury dated 2 July 2007 were considered. The letters were on the court case regarding the award of the tender to the consortium of BWSC/ Aldwych. iv. Board extracts of a meeting held on 10 November 2010, where circular 40/10 was considered, which indicated that the Board resolved to approve and authorise: The renewal and enhancement of SBLC for both fuel and capacity payments with	i. Board minutes for the meeting held on 3 August 2007 (Annexure 3.1.12.6) ii. Board minutes for the meeting held on 3 August 2007 (Annexure 3.1.12.6) iii. Board meeting minutes extract of a special Board meeting held on 24 September 2007 (Annexure 3.1.12.7) iv. Board extracts of a meeting held on

IPP	Board Minutes that were not signed.	Referenced Document
	Kenya Commercial Bank Ltd for a period of one year, Issuance of the Board resolution to the bank, Execution under hand or under the common seal of the Company of the necessary documents and Issuance of letters of negative pledge. v. Extracts of the minutes of the Board meeting held on 16 March 2016, indicating that the Board, vide BM 30/16 approved the amendments to the PPA and its execution under hand and the company's common seal of the amendments deed to the PPA, once ERC approval was obtained. The amendment deed is dated 3 October 2016.	10 November 2010 (Annexure 3.1.12.8) v. Extracts of the minutes of the Board meeting held on 16 March 2016 (Annexure 3.1.7.21)
Lake Turkana Wind Power Limited	i. Extract of the Board minutes for the meeting held on 21 January 2009 which indicated that the Board, under BM.12/09, approved procurement of LTWP at a negotiated tariff of Euro cents 7.22 kWh (of which Euro cents 6.724/kWh was non-escalable and Euro cents 0.946/kWh was escalable) under a 20-year PPA, subject to Cabinet approval. ii. Board minute extract for the meeting held on 26 January 2017 which indicated that under BM/25/17, the Board considered circular 13/17 and resolved to approve the appointment of the Letter of the credit-issuing bank for LTWP. iii. Board minute extract for the meeting held on 26 January 2017 indicating that under BM/26/17, the Board considered circular 13/17 and resolved to approve the appointment of an escrow agent and the opening of an escrow account for LWTP project. iv. Board extract, under the BM. 107/17, indicating that a Board meeting was held on 3 August 2017 and the variation reference under the Board circular no. 76/11 were discussed. One of the present Board members, Mr Adil Khawaja, declared a conflict of interest on the agenda and requested another member,	i. Extract of the Board minutes for the meeting held on 21 January 2009 (Annexure 3.1.12.9) ii. Board minutes extract for the meeting held on 26 January 2017 (Annexure 3.1.12.10) iii. Board minutes extract for the meeting held on 26 January 2017 (Annexure 3.1.12.10) iv. Board meeting extracts for the meeting held on 03 August 2017 (Annexure 3.1.12.11)

IPP	Board Minutes that were not signed.	Referenced Document
	Mr Wilson Kimutai, to take the Board through the item. The Board approved the negotiated second variation agreement, its initialling, and submission to ERC for approval and execution under the company's common seal upon receipt of ERC approval.	
Strathmore University	i. The extract of the Board minutes of the meeting held on 03 August 2017 where the Board approved the amended PPA, its initialling and submission to ERC for approval, and its execution upon receiving the ERC approval.	i. Extract of the Board minutes of the meeting held on 03 August 2017 (Annexure 3.1.12.12)
Regen-Terem SHPP Limited	i. Extracts of the minutes indicating that the Board vide BM no. 66/09 approved the negotiated PPA between KPLC and GenPro, its submission to ERC for approval and its execution under common seal on receipt of ERC approval.	i. Extracts of the minutes of the Board meeting held on 26 June 2009 (Annexure 3.1.12.13)
Cedate Limited	i. Board meeting extracts where the Board was indicated to have approved the requests to approve: the negotiated 40MW solar PPA between KPLC and Eldosol, the initialling and submission of the negotiated PPA to the PPP Committee for approval, the submission of the negotiated PPA to the ERC for approval and the execution under the common seal of the company of the PPA on obtaining ERC approval.	i. Extracts of the minutes of the Board meeting held on 16 March 2016 (Annexure 3.1.12.14)
Malindi Solar Group Limited	i. The extract of minute no. 29/16 where the Board approved the negotiated PPA in a Board meeting held on 16 March 2016. ii. The minutes where the Board in a meeting held on 29 May 2018 and minutes recorded under BM no. 80/18, approved the deed of variation and its submission to ERC for approval.	i. Extract of Board Minute no. 29/16 (Annexure 3.1.12.15) ii. Minutes of the Board meeting held on 29 May 2018 (Annexure 3.1.12.16)
Chania Power Company, Metumi Power Company, and Gura Power Company Limited	i. An extract of Board minutes for the meeting held on 26 January 2017 indicating that under BM no. 27/17, the Board approved: • The seven negotiated PPAs between KPLC (buyer), the individual IPPs (seller), and KTDA (sponsor). The seven included Metumi Power Co.	i. Extract of Board minutes for the meeting held on 26 January 2017 (Annexure 3.1.12.17)

IPP	Board Minutes that were not signed.	Referenced Document
	Ltd, Gura Power Co. Ltd and Chania Power Co. Ltd. • The initialling and submission of the negotiated PPAs to the ERC for approval. • The execution under the common seal of the company of the PPAs on obtaining ERC approval.	

3.1.12.1c Board Resolutions / Minutes that were signed by the MD (not the Board Chair as required) and/or the Company Secretary.

Table 22: Board Resolutions / Minutes that were signed by the MD (not the Board Chair as required) and/or the Company Secretary.

IPP	Board Resolutions / Minutes Signed by the MD (not Board Chair as required) and/or the Company Secretary.	Documents Referenced
Lake Turkana Wind Power Limited	i. An extract of Board resolutions passed at the meeting held on 4 November 2009, signed by KPLC MD & CEO Dr. Ben Chumo and GM, Corporate affairs and Company Secretary Beatrice Meso on 21 August 2014, which indicated that at its meeting duly convened on 9 November 2009 at which quorum was present, the Board considered circular 7/09 and approved the negotiated LTWP PPA, its initialling and submission to ERC for approval, and authorised its execution under the common seal of the company upon obtaining ERC approval. ii. Extract of Board resolutions passed at the meeting held on 7 May 2013, signed by KPLC MD & CEO Dr Ben Chumo and Company Secretary Beatrice Meso on 21 August 2014, which indicated that at its meeting duly convened on 7 May 2013 at which quorum was present, the Board considered circular No. 14/13 and resolved to approve the amended and restated PPA and authorised its execution under the company's common seal on obtaining ERC approval. iii. Extract of Board minutes for the meeting held on 29 November 2013, signed by the Ag. Company Secretary only, Ms Beatrice Meso which indicated the	i. Extract of Board resolutions passed at the meeting held on 4 November 2009 (Annexure 1.3.1.1) ii. Extract of Board resolutions passed at the meeting held on 7 May 2013 (Annexure 3.1.12.18) iii. Extract of Board minutes for the meeting held on 29 November 2013

IPP	Board Resolutions / Minutes Signed by the MD (not Board Chair as required) and/or the Company Secretary.	Documents Referenced
	salient features of the Escrow Agreement that were noted.	(Annexure 3.1.12.19)
	iv. An extract of Board resolutions passed at the meeting held on 30 July 2014, signed by KPLC MD& CEO Dr Ben Chumo and Company Secretary Beatrice Meso on 21 August 2014, which indicated that at its meeting duly convened on 30 July 2014 at which quorum was present, the Board considered circular No. 20/14 and resolved to approve the variation agreement to the amended PPA dated 13 May 2013 and to execute under hand and under the common seal of the company of the variation agreement.	iv. Extract of Board resolutions passed at the meeting held on 30 July 2014 (Annexure 3.1.12.20)
	v. An extract of Board resolutions passed at the meeting held on 3 August 2017, signed by KPLC MD & CEO Ken Tarus and Company Secretary Beatrice Meso on 11 September 2017, which indicated that at its meeting duly convened on and held on 3 August 2009, at which quorum was present, the Board considered approved the negotiated second variation agreement, its initialling, and submission to ERC for approval and execution under the company's common seal upon receipt of ERC approval.	v. Extract of Board resolutions passed at the meeting held on 3 August 2017 (Annexure 1.3.1.4)
	vi. An extract of Board resolutions passed at the meeting held on 29 November 2013, signed by KPLC MD& CEO Ken Tarus and Company Secretary Beatrice Meso on 18 October 2017, indicated that at its meeting duly convened on 29 November 2013 at which quorum was present, the Board approved the execution under common seal of the Company of the Escrow Agreement approved and authorised execution of the mandate letter by KPLC and GOK to the Escrow Agent.	vi. Extract of Board resolutions passed at the meeting held on 29 November 2013 (Annexure 1.3.1.5)
Biojoule Limited	i. A document entitled "Extract of Board resolution passed at the meeting held on 9 December 2014" dated 25 August 2016 and signed by KPLC MD & CEO Dr Ben Chumo and GM, Corporate Affairs & Company Secretary Betty Meso, which	i. Document entitled "Extract of Board resolution passed at the meeting held on 9 December 2014" dated 25 August 2016 (Annexure 1.3.1.6)

IPP	Board Resolutions / Minutes Signed by the MD (not Board Chair as required) and/or the Company Secretary.	Documents Referenced
	stated that directors considered circular 41/14 and resolved: • To approve the negotiated PPA between KPLC and Biojoule in respect of the 2.2MW biogas generation plant. • Execute the PPA under hand and under common seal of the Company.	
Hydro Project Service Peters Limited	i. Board meeting minutes extract dated 22 February 2019 and signed by Ag. MD & CEO Jared Othieno and Ag. Corporate Affairs & Company Secretary, Imelda Bore, which indicated that the Board approved the negotiated PPA in a meeting held on 20 July 2017. This is also indicated in the unsigned Board meeting extract under BM no. 98/17 of the meeting held on 20 July 2017.	i. Board meeting minutes extract dated 22 February 2019 (Annexure 3.1.12.21)
Kipeto Energy Limited	i. An extract of the Board meeting minutes signed by Eng. Jared Otieno, Ag KPLC MD & CEO, and Imelda Bore, Ag GM, Corporate Affairs and Company Secretary, dated 07 November 2018, which indicated that the Board held a meeting on 09 December 2014, where it approved the negotiated PPA between KPLC and Kipeto.	i. Extract of the Board meeting minutes dated 07 November 2018 (Annexure 3.1.12.22)
Selenkei Investments Limited	i. Board meeting minutes extract dated 22 February 2019 and signed by Ag. MD & CEO Eng. Jared Othieno and Ag. GM, Corporate Affairs & Company Secretary, Imelda Bore, which indicated that the Board in a meeting held on 16 March 2016, under BM no. 28/16, approved the negotiated PPA between Radiant and KPLC, its initialling and submission to the PPP Committee and ERC for approval, and its execution under the common seal of the company upon ERC approval.	i. Board meeting minutes extract dated 22 February 2019 (Annexure 3.1.12.23)

3.1.12.1d Instances where minutes highlighting Board approvals of the PPAs were signed after the PPA had been executed.

Table 23: Instances where minutes highlighting Board approvals of the PPAs were signed after the PPA had been executed.

IPP	Instances where minutes highlighting Board approvals of the PPAs were signed after the PPA had been executed.	Documents Referenced
Biojoule Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board resolutions as set out in a schedule which included, among others, Biojoule. The PPA approval date for Biojoule was dated as 9 December 2014.	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)
Power Technology Solutions Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board resolutions as set out in a schedule which included, among others, PTSL. The PPA approval date for PTSL was dated as 20 July 2013 and it was executed on 1 November 2017.	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)
Cedate Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board resolutions as set out in a schedule which included, among others, Cedate. The PPA approval date for Cedate was dated as 16 March 2016 and it was executed on 5 June 2017.	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)
Hydro Project Service Peters Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)

IPP	Instances where minutes highlighting Board approvals of the PPAs were signed after the PPA had been executed.	Documents Referenced
	resolutions as set out in a schedule which included, among others, HPSP. The PPA approval date for HPSP was dated as 20 July 2013 and it was executed on 19 February 2018.	
Malindi Solar Group Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board resolutions as set out in a schedule which included, among others, Malindi Solar. The PPA approval date for Malindi Solar was dated as 16 March 2016 and it was executed on 5 June 2017.	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)
Selenkei Investments Limited	Board circular no. 13/19 dated 21 January 2019 and signed by the KPLC MD Eng. Jared Othieno indicated that a paper was presented to the Board on 18 December 2018, and guidance was given for management to review and avail Board handwritten and draft minutes approving the PPAs indicated in the paper as well the minutes of the ICT and PPA committees. Based on the documents availed, the Board was requested to authorize the signing of the Board resolutions as set out in a schedule which included, among others, Radiant. The PPA approval date for Radiant was dated as 16 March 2016 and it was executed on 5 June 2017.	Board circular no. 13/19 dated 21 January 2019 (Annexure 3.1.12.24)

3.1.12.2. Instances where the KPLC Board ratified PPAs that had already been executed.

Table 24: Instances where the KPLC Board ratified PPAs that had already been executed.

IPP	Instances where the Board ratified PPAs that had already been executed	Documents Referenced
OrPower 4 Inc	Circular dated 2 November 1998 and signed by KPLC MD Samuel Gichuru requested the Board to ratify management's actions in: • Awarding the Olkaria III IPP project to Orpower 4 Inc • Executing under the common seal of the company, the PPA, and the security agreement.	Circular dated 2 November 1998 (Annexure 3.1.6.8)
Gulf Power Limited	Per the extracts of the Board meeting held on 2 August 2013, signed by the Chairman and Secretary on 16 September 2013, the directors considered circular 25/13 and further to the Board approval under BM/75/12 of 26 November 2012,	Extracts of the Board meeting held on 2 August 2013

IPP	Instances where the Board ratified PPAs that had already been executed	Documents Referenced
	approved additional agreements in respect to the 80.3 MW plant to be developed by Gulf. These agreements were: • PPA dated 17 December 2012 • Direct agreement dated 9 May 2013 between KPLC, Gulf Power Limited, IFC, Standard Bank of South Africa and OPEC fund for internal Development • PRG Support Agreement dated 14th March 2013 between KPLC, GOK and Gulf Power Limited • RCA dated 14 March 2013 between KPLC, the GOK and JPMorgan Chase Bank N.A London Branch • The lease dated between KPLC and Gulf Power Limited dated 14 April 2013 The Board resolved to • Ratify the execution of the above agreements above under the common seal of the company under hand by the MD&CEO Eng. Joseph Njoroge, and Laurencia Njagi, company Secretary. • Authorise the execution of the Variation Agreement by hand or under the Common Seal of the company by Eng Joseph Njoroge, MD and the Company Secretary, Laurencia Njagi	(Annexure 3.1.7.23)
Triumph Power Generating Company Limited	Per an extract of Board minutes shared, which were signed by the Chairman Eliazar O. Ochola and the secretary Laurencia Njagi on 14 September 2012, the Board, in a meeting held on 20 July 2012 considered circular 28/12 and approved the Amended PPA 2012 and the other associated documents. It also ratified the execution of the PPA on behalf of the company under hand and under Common Seal by the MD Eng Joseph Njoroge and the Company Secretary, Laurencia Njagi.	Extract of Board minutes for the meeting held on 20 July 2012 (Annexure 3.1.7.22)
Thika Power Limited	The Board was requested to ratify the decision of the IPP Committee of approving that Melec Powergen Inc was the lowest bidder for the Thika Plant 3.	Board circular 20/10 dated 16 April 2010 (Annexure 3.1.12.26)

3.1.12.3. Instances where the PPAs were approved by ERC before KPLC Board Approval

Table 25: Instances where the PPAs were approved by ERC before KPLC Board Approval

IPP	PPA approved by ERC before KPLC Board approval	Documents Referenced
Iberafrica Power Limited	The Amended and Restated PPA - ERC approved initialled amended and restated PPA	i. ERC approval of the amended and restated

IPP	PPA approved by ERC before KPLC Board approval	Documents Referenced
	for the 56.346MW and 52.5MW on 21/12/2007 before the board gave conditional approval in a special Board meeting held on 12 June 2008.	Iberafrica PPA (Annexure 3.1.12.27) ii. Board approval of the amended and restated Iberafrica PPA (Annexure 3.1.12.28)
Triumph Power Generating Company Limited	The Amended PPA of 2012 - The approval of the PPA was granted by ERC on 7 June 2012 before Board Approval on 20 July 2012.	i. ERC approval of Triumph Power Amended PPA of 2012 (Annexure 3.1.12.29) ii. Board approval of Triumph Power Amended PPA of 2012 (Annexure 3.1.7.22)
Gulf Power Limited	The Amended PPA of 2012 and other related documents - The Instrument of Approval by ERC was granted on 7 June 2012 based on a PPA dated 5 May 2012. This was way before the Board approval on 26 November 2012.	i. ERC approval of Gulf Power Amended PPA of 2012 (Annexure 3.1.12.30) ii. Board approval of Gulf Power Amended PPA of 2012 (Annexure 3.1.12.31)
Lake Turkana Wind Power Limited	The 3rd Amended and Restated PPA, 2013 - ERC approved the 3rd amended and restated PPA on 6 May 2013, this was before Board approval on 7 May 2013.	i. ERC approval of LTWP 3rd Amended and Restated PPA, 2013 (Annexure 3.1.12.32) ii. Board approval of LTWP 3rd Amended and Restated PPA, 2013 (Annexure 3.1.12.33)
Power Technology Solutions Limited	The Negotiated PPA – ERC approved the PPA on 6 December 2012, this was way before Board approval on 12 June 2013.	i. ERC approval of PTSL negotiated PPA (Annexure 3.1.12.34) ii. Board approval of PTSL negotiated PPA (Annexure 3.1.8.7)

3.1.12.4. KPLC Board overrules concerns raised by various stakeholders

Table 26: KPLC Board overrules concerns raised by various stakeholders

IPP	Concerns raised	Document referenced
Lake Turkana Wind Power Limited	Concerns were raised by the following parties: • Board member(s) on the unsolicited bid from LTWP. • Management on the size of the plant during PPA negotiations. • A Board member on the signing of the PPA as being premature based on the issues that had been raised. • World Bank on the LTWP project, which led to its withdrawal of the Partial Risk Guarantee (PRG).	i. Extract of Board minutes for a special meeting held on 20 January 2009 (Annexure 3.1.6.10) ii. Board circular no. 70/09 (Annexure 3.1.11.6) iii. Board minutes extract of a Board meeting held on 4 November 2009 (Annexure 3.1.12.35) iv. Board circular no. 14/13 (Annexure 3.1.12.36)
Hydro Project Service Peters Limited	The ICT & PPA Committee raised concern about the high tariff charged for the project (HPSP) compared to other hydro power projects.	i. Board Circular 69/17 dated 19 July 2017 (Annexure 3.1.12.37)

3.1.12.5. KPLC Board IPP Committee (not Management) negotiating with the IPP.

Table 27: KPLC Board IPP Committee (not Management) negotiating with the IPP

IPP	IPP Committee (not Management) negotiating with the IPP	Documents Referenced
Lake Turkana Wind Power Limited	The KPLC IPP Board Committee is indicated to have negotiated the LTWP PPA.	i. Board circular no. 70/09 (Annexure 3.1.11.6) ii. Board circular no. 71/09 (Annexure 3.1.6.11)
Iberafrica Power Limited	• KPLC IPP Board Committee negotiated the following with Iberafrica: ▪ Development of an additional 50MW power generating plant. ▪ Amended and restated PPA. ▪ Iberafrica offer to provide an additional 30 MW.	i. Unsigned minutes extracts of a special Board meeting held on 24 August 2007 (Annexure 3.1.12.2) ii. Extract of Board minutes for the meeting held on 28 August 2007 (Annexure 3.1.12.38) iii. Board minutes extract of the meeting held on 11 November 2008 (Annexure 3.1.12.39)

3.1.12.6. KPLC Board PPA approval prior to approval by its IPP Board Committee

Table 28: KPLC Board PPA approval prior to approval by its IPP Board Committee

IPP	PPA approval prior to approval by its IPP Board Committee	Documents Referenced

Imenti Tea Factory Limited Regen-Terem SHPP Limited	The PPAs for Imenti and Regen-Terem were approved by the Board before IPP Board Committee approved it.	Minutes of the special Board meeting held on 26 June 2009 (Annexures 3.1.8.9 and 3.1.8.8)

3.1.12.7. Other governance exceptions

Table 29: Other governance exceptions

IPP	Other Exceptions	Documents Referenced
Power Technology Solutions Limited Selenkei Investments Limited	• Inconsistent details in KPLC Board minutes, circulars or PPAs.	i. Extracts of Board minutes signed off by the Chairman and Secretary on 16 September 2013 for the meeting held on 12 June 2013 (Annexure 3.1.8.7) ii. Board circular no. 13/19 (Annexure 3.1.12.24) iii. Circular 22/13 (Annexure 3.1.12.40) iv. Board circular no. 24/19 (Annexure 3.1.12.41)
Biojoule Limited	• Extended time for Board and ERC approval	i. ERC Approval of Biojoule Limited (Annexure 3.1.12.42)

Recommendations
KPLC should leverage existing document management system and the digitisation of records to ensure all PPA documents are well archived and numbered for ease of retrieval on need basis. The Company Secretary should ensure all minutes are signed by the Board Chair and Company Secretary as evidence of the proceeding at a meeting and an accurate record of what happened at the relevant meeting. The MD/CEO should ensure all requisite approvals are obtained before executing a PPA. This included necessary board and regulatory approvals. The Board should maintain its independence from management roles and should not be involved PPA negotiations. Board PPA approvals should be recommended by the respective Board Committee (Currently Strategy and Innovation Committee) responsible for ensuring proper controls were in place and appropriate checks and balances to arrive at the recommended PPA.

3.2. IPP Selection Criteria, Events Chronology and Summary of Procurement Findings

As indicated in Section 1.2.1, under the term of reference we were required to:

TOR 1: Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable laws and or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes.
TOR 2: Establish the selection criteria used to identify the eventual IPP in each instance.
TOR 15: Assess whether there is malpractice in the procurement of IPPs and: (i) Determine whether there was any fraud; (ii) Assess the extent of fraud; (ii) Establish the modus operandi of the fraud scheme; (iv) Quantum of the loss/damage to KPLC because of the fraudulent and corrupt acts; (v Identify the culpable/responsible persons and parties.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.2. of this report.

The following is our summary of findings following our review of the procurement process and the selection criteria used by KPLC to identify each of the 20 operational IPPs in scope of this engagement, with the first one having been identified in 1996.

Table 30: Summary of Findings following Review of Procurement Process and IPPs Selection Criteria

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
A	Procurement process irregularities		
	Inconsistent tender submission details and evaluation		
	• KPLC single-sourced Mott Ewbank Precee (MEP) to review the bids for Iberafrica tender and assist with negotiations with OrPower.	Iberafrica OrPower4	A memo dated 4 March 1996 from the KPLC Corporate Planning Manager, M. A Gupta, to the MD, Samuel Gichuru (Annexure 3.1.6.3)
	• Representation of the Managing Director (MD) in the tender opening meetings. • Two entities whose bids were evaluated had not been invited by KPLC to bid for the Iberafrica tender. • The tender evaluation criteria was not in the bid document other than that it would take financial appraisal based on 7,000 hours/year of generation at full load and their right not to award the lowest tenderer. This could have led to a skewed evaluation.	Iberafrica	PP.6.75.5 (unsigned and undated) summarising the tender invitation and evaluation (Annexure 3.1.6.1)
	• Out of the two bidders who tendered, CalEnergy was	OrPower	Circular 5435 (Annexure 3.1.6.7)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	indicated to have scored higher points of 137 compared to Ormat's 116. In addition, CalEnergy had a lower price offer. Despite the fact that CalEnergy offered a lower price (8.49 UScts/KWh) for a higher capacity (of 129MW), it was determined as non-compliant with specifications, as it included Olkaria II.		
	• Africa Infrastructure Development Company representative in the tender opening meeting despite the entity not being invited to bid. • Contract award to Simba Energy on a single sourcing basis (offer later withdrawn) –One of the bidders for the Rabai plant, Simba Energy, was disqualified for failure to meet minimum requirements. KPLC IPP Board Committee and Board later awarded another IPP project on a single sourcing basis to Simba Energy. Simba Energy rejected the capacity charge rate they had been offered by KPLC. The offer was therefore withdrawn.	Rabai	Summary of the evaluation report for the proposed Rabai 89-90 MW plant, attached to Board circular no. 60/6 (Annexure 3.2.1)
	• The evaluation criteria for Gulf and Triumph had different criteria under compliance with project milestones, specifically the Commercial Operation Date.	Gulf, Triumph	Tender evaluation reports (Annexures 3.2.2 and 3.1.8.5)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	IPP qualified for financial evaluation despite not fully meeting the technical evaluation criteria		
	• Triumph was progressed to financial evaluation despite not fully meeting the technical evaluation criteria.	Triumph	Technical evaluation report referenced as PP.19.5 (Annexure 3.1.8.5)
B	High tariff costs identified or inconsistent approval of the tariffs		
	• High tariff costs were identified at the PPA negotiations stage, which were to be passed to consumers.	Iberafrica, OrPower4, LTWP, Triumph, Gulf, Regen-Terem, HPSP,Malindi, Thika, Selenkei, Imenti	i. ERC letter dated 12 August 2009 (Annexure 3.2.3) ii. Board circular no. 23/14 dated 03 September 2014 (Annexure 3.1.11.4) iii. Board circular no.48/16 dated 6 September 2016 (Annexure 3.2.4) iv. Board circular no. 30/11 (Annexure 3.1.6.9) v. Board Circular no. 76/17 (Annexure 3.2.5) vi. Circular 17/11 dated 25 March 2011 (Annexure 3.2.6) vii. Minutes of the IPP Board Committee meeting held on 29 December 2009 (Annexure 3.1.8.6) viii. Board circular no 57/09 (Annexure 3.1.8.1) ix. Board circular no. 18/16 (Annexure 3.2.7) x. Board circular no. 19/11 (Annexure 3.2.8)
	• Inconsistency around tariffs negotiated and the board approved and what is included in the signed PPA. • Enhancement of Iberafrica plant by 50MW: The charge rate of US 300/kW/yr, out of which US$ 59.87/kW/yr was escalable and an energy charge rate of U.S. cents 1.2 /kWh communicated to ERC for approval was different from the rates approved by the Board of capacity charge rate of US$285kW/yr made up escalable	Iberafrica	Extract of Board minutes for the meeting held on 28 August 2007 (Annexure 3.1.12.38)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	component of US$228/kW/yr and a variable component of US 57/kW/yr and escalable energy charge rate of US$ 0.92/kWh.		
C	Government directives impacting procurement of PPAs. The GOK, through the MOE, ERC or MOF issued various directives that impacted how the PPAs were procured.		
	• The MOE in a letter dated 16 August 2004 signed by the PS Patrick Nyoike, addressed to KPLC MD Eng. Jasper O. Oduor, and copied to ERC Chair, Mr. John Matere Keriri, conveyed a decision by the Government to have the PPA between KPLC and Iberafrica renewed for a term of 15 years at a fixed capacity charge of US$ 197.5/kWh/yr from the date of expiry of the contract period. • MOE through a letter dated 22 March 2007 signed by the PS Patrick N. Nyoike addressed to the MD, Tsavo, Michael Fox and Iberafrica GM and CEO Mr. Henry Muthanji, requested for proposals for capacity enhancement.	Iberafrica	i. MOE letter dated 16 August 2004 (Annexure 3.1.11.2) ii. MOE letter dated 22 March 2007 (Annexure 3.1.11.1)
	• Board circular no. 65/06 dated 22 September 2006 and signed by KPLC GM & CEO Don Priestman indicated that MOE PS, Patrick Nyoike, wrote to KPLC on 19 September 2006 recommending a prompt conclusion of the 2nd Amended and Restated PPA, 2006. • An extract of Board minutes for the meeting held on 29 June 2012 signed by the Chair and Secretary on 14 September 2012 indicated that the MoE PS, Patrick Nyoike, reported that OrPower4 had requested to be paid a special tariff.	OrPower	i. Board circular no. 65/06 (Annexure 3.2.9) ii. Extract of Board minutes for the meeting held on 29 June 2012 (Annexure 3.1.11.3) iii. Board circular no. 23/14 (Annexure 3.1.11.4)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	• Board circular no. 23/14 dated 03 September 2014 and signed by KPLC MD & CEO Dr. Ben Chumo referred to a letter from the MoE PS, Dr. Eng. Joseph Njoroge dated 28 March 2014 where guidance was given to engage OrPower4 with a view of leveraging on the development of additional geothermal capacity due to its competitive tariff. The MOE letter was not availed for our review.		
	• Circular 71/09 stated that on 22 May 2009, the MoF informed MoE that there was no need for the Cabinet approval of the LTWP project and other projects, including the 29.5MW Athi River Coal project and the 30MW Iberafrica as they would not entail any policy change. MOE opined that the appraisal criteria conducted by KPLC and ERC would suffice for the project. Subsequently, MoE and MoF mandated KPLC to proceed with the implementation of LTWP in a letter dated 25 May 2009 and 03 June 2009 respectively. • Per Board circular no. 70/09 dated 28 October 2009 and signed by Eng. David M. Mwangi, Chief Manager Planning and Research, it was noted that MOE PS had proposed that KPLC absorbs US cents 3.00/kWh of the tariff, with the rest being passed through to customers. • Per Board circular no. 27/12 dated 12 July 2012 and signed by Eng. Joseph K Njoroge, the MOE PS opined that considering the expected ballooning of power resulting from the exploitation of the Turkana oil discovery and the current country's food security strategy, the projected curtailment did not exist.	LTWP	i. Circular 71/09 (Annexure 3.1.6.11) ii. Board circular no. 70/09 (Annexure 3.1.11.6) iii. Board circular no. 27/12 (Annexure 3.1.11.7)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	• KPLC and Kipeto disputes – MOE, vide a letter dated 5 October 2020 was indicated to have guided KPLC to separate technical and commercial issues for Kipeto to commence the technical commissioning of the project.	Kipeto	Board circular no. 155/20 (Annexure 3.2.10)
	• Government directive to KPLC to revalidate lapsed PPAs for Chania, Metumi and Gura - Board circular no 14/17 dated 24 January 2017 and signed by KPLC MD & CEO, Dr. Ken Tarus indicated that a letter from MOEP dated 13 December 2016 gave KPLC directions to revalidate the PPAs which had been entered into to make them effective.	Chania, Metumi and Gura	Board circular no 14/17 (Annexure 3.2.11)
	• The Solicitor General's view on charging of and assigning all present and future rights, titles, interests, and benefits in and to the GOK letter of support to IPPs' lenders. Subsequent correspondence indicating how the Solicitor General's concerns were addressed was not availed for our review.	Selenkei and Cedate	Solicitor General's letter dated 17 July 2019 (Annexure 3.2.12)
D	Post facto approval of PPAs by the PPP Committee contrary of required procedure		
	• Approval of PPAs were sought from the PPP committee after the PPAs had been executed contrary to the directive given by National Treasury.	Cedate, Chania, Malindi, Selenkei and HPSP	i. Letter by MOEP to KPLC MD&CEO, Dr. Ben Chumo, dated 4 January 2016 (Annexure 3.2.13) ii. Letter by KPLC to the National Treasury Director for Public Private Partnerships dated 29 November 2018 (Annexure 3.2.14)
E	Demand risk arising from new power generation plants		
	• KPLC Management and Board raised concerns over contracting additional PPAs citing projected excess generation capacity	All power generation plants whose PPAs had not been concluded by October 2018.	i. KPLC letter to ERC on excess generation capacity dated 8 October 2018 (Annexure 1.3.8.1)

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	compared to the pace of growth in electricity demand. • They indicated that contracting the PPAs would accelerate the consistent failure by KPLC to meet Deemed Generated Energy (DGE) payment obligations resulting in default by KPLC that would lead to PPA termination, consequently requiring funds for termination payments. • ERC Director General requested KPLC Management and Board to consult wider, as the issue was a critical national matter, before suspending PPA negotiations and later provided guidance on CODs for various projects. • A moratorium on all PPAs not concluded by 29 March 2021 was gazetted. Per Cabinet Despatch[25] dated 28 February 2023, the President William Samoei Ruto, PhD, C.G.H chaired a cabinet meeting where the moratorium on PPAs was lifted.		ii. KPLC letter to ERC on seeking guidance on CODs and ERC's response on the same dated 8 November 2018 (Annexure 3.2.15) iii. ERC response to KPLC providing guidance on PPAs dated 15 November 2018 (Annexure 3.2.16) iv. KPLC letter to ERC on suspending considerations of PPAs for additional generation dated 21 December 2018 (Annexure 3.2.17) v. ERC's response to KPLC on suspending considerations of PPAs for additional power generation dated 24 November 2018 (Annexure 3.2.18) vi. KPLC letter to ERC seeking confirmation on CODs dated 4 March 2019 (Annexure 3.2.19) vii. PPA Moratorium Gazettement on 29 March 2021 (Annexure 1.3.8.2) viii. Desptach from Cabinet dated 28 February 2023
F	Other Exceptions		
	• Lack of requirement for IPPs to provide financial models.	All IPPs except Kipeto	i. The PPAs reviewed (Annexures 1.3.6.1 - 1.3.6.13, 1.3.6.15 - 1.3.6.20) ii. Board circular no. 34/18 (Annexure 3.2.20) iii. Board minutes for the meeting held on 29 May 2018 (Annexure 3.2.21) iv. Board circular no. 43/18 (Annexure 3.2.22)

[25] Link to the Desptach from Cabinet dated 28 February 2023 The Despatch states that *'In addressing the challenges of realizing sustainable energy mix occasioned by the prolonged drought, Cabinet approved the lifting of the moratorium on Power Purchase Agreements (PPAs) as a way of enhancing our nation's energy security through opening up the energy sector for continued investments. Cabinet further approved a framework for transparent engagement of independent power producers in keeping with the Renewable Energy Auction Policy.'*

#	Nature of key findings noted	Impacted IPPs	Referenced Documents
	• Lack of requirement by IPPs to provide annual audited financial statements against which audited financial models would be reviewed.	All IPPs	All the reviewed PPAs (Annexure 1.3.6.1 - 1.3.6.20)
	• PPAs for the following IPPs were lapsed due to failure to meet the conditions precedent and subsequently revalidated.	Strathmore, Chania, Gura, Metumi	i. Board circular 78/17 (Annexure 3.2.23) ii. Board circular no 14/17 (Annexure 3.2.11)
	• Backdated ERC approval.	Kipeto	i. ERC letter dated 17 March 2015 (Annexure 3.2.24) ii. ERC letter dated 8 June 2018 (Annexure 3.2.25) iii. ERC Approval of Kipeto PPA (Annexure 3.2.26)

Our recommendations on the above findings are included in section 1.3 – Summary of overall recommendations and conclusions.

Overall recommendation
• A key recommendation is that all projects are subject to competitive procurement under international procurement standards. The implementation of best practice tender processes, from pre-qualification to financial close is essential to promote credibility in tender design and evaluation, and ensure due process is followed at each step, including in detailed aspects such as providing audited financial models at financial close to anchor the subsequent project implementation. Management should ensure that the set procurement processes and regulations are followed. • Inadequate governance structures expose KPLC and the GOK to sub-optimal outcomes and can also undermine the credibility of the Kenyan market for international investors. To address these issues, it is crucial that the roles of all parties in the sector are clearly identified, that processes are designed and understood (e.g., for PPA procurement and approval) and that KPLC's Board has sufficient structures of accountability in place to safeguard the interests of its shareholders and customers. • Compliance to the set regulatory framework should be adhered to by all parties. • Impact of additional PPAs to any tariff increase should be thoroughly assessed. While KPLC needs to operate as efficiently as possible - for example, through loss reduction programs on its electricity distribution network - it is also critical that the regulatory and tariff framework supports its position as a credible off-taker to enhance sector credibility. • Several changes have arisen with the planning process in recent years in Kenya, which combined with the removal of the potential for unsolicited bids and restrictions in the FIT policy provides a clearer basis for contracting new capacity. However, weaknesses have been identified in the current planning arrangements that creates important risk in contracting more VRE, namely that current tools do not cover ramping rates, nor can they model storage. Appropriately modified, the LCPDPs should form the cornerstone of contracting new capacity, whether through KenGen or IPPs. An additional development could be to use the planning tools to evaluate the continued feasibility of any project that is delayed beyond agreed timeframes, providing KPLC with an exit strategy.

- A requirement should, be included in all new PPAs for an audited financial model to be developed. Similarly, a requirement should be included in all new PPAs for IPPs' audited financial statements to be shared with KPLC annually. The financial statements would be relied on for review of the financial and operational parameters alignment with the financial models.

Other findings relating to IPP Selection and Procurement.

Planning and project feasibility

Planning provides a cornerstone to market development, allowing the electricity system to develop and adapt to dynamic situations, including the integration of variable renewable energy (VRE) sources. Moreover, there is a strong need to ensure coherence between generation planning and network planning processes. A detailed review of planning processes was outside the scope of this assignment, though several weaknesses that could have contributed to higher cost of power purchase, which have planning dimensions were identified. These include:

- Limited discussion was seen in the Board minutes and other documents about the necessity to continue with projects that may be delayed (for example, projects under the Feed in Tariff (FiT) with difficulties in obtaining financial close) or have notable difficulties (LTWP). Development plans over the past 10 years have overestimated demand, in some cases dramatically, which created an environment under which a premium has been placed on contracting new projects regardless of cost efficiency.
- There has been a weak relationship between projects identified in Master Plans and those developed, partly due to projects under the FIT being developer-led and other projects being identified by bilateral agreement (e.g., LTWP).
- In the case of LTWP, the World Bank raised concerns in 2012 as to whether adding 300MW of wind capacity at Lake Turkana was an optimal situation for the system (Annexure 3.1.12.36). The concerns around the size of the LTWP plant compared to the Kenyan power system and hence the ability of the project to be accommodated by the Kenyan power system had been earlier raised by the management in a meeting held on 30 July 2009 (Annexure 3.1.11.6). There was no evidence availed that the decision to go ahead with the project despite these concerns was based on planning criteria. The World Bank withdrew its Partial Risk Guarantee (PRG) and GOK, LTWP, and KPLC came up with an alternative payment security arrangement to replace World Bank guarantees. Refer to Section 3.6 of Report 3A – Summary of Procurement Findings.
- Several changes have arisen with the planning process in recent years in Kenya, which combined with the removal of the potential for unsolicited bids and restrictions in the FIT policy provides a clearer basis for contracting new capacity. However, weaknesses have been identified in the current planning arrangements that creates important risk in contracting more VRE, namely that current tools do not cover ramping rates, nor can they model storage.

Appropriately modified, the LCPDPs should form the cornerstone of contracting new capacity, whether through KenGen or IPPs. An additional development could be to use the planning tools to evaluate the continued feasibility of any project that is delayed beyond agreed timeframes, providing KPLC with an exit strategy.

Demand Risk

Demand risk occurs at several levels. At one level, concerns were expressed regarding the potential to have excess installed capacity. This was evident in the LTWP development process, where important divergences of views were evident between LTWP's own advisors, the GOK and the KPLC Board. More recently, KPLC was leading concerns over excess capacity arising from developments largely under the

FIT process, with no clear process agreed to address these concerns with ERC until a moratorium[26] was placed through the Presidential gazettal notice of 29 March 2021 (Annexure 1.3.8.2). Before the moratorium was effected, KPLC Board had written to ERC in December 2018 (Annexure 3.2.17) indicating that it had suspended considerations of PPAs for additional generation. The ERC, however, requested KPLC, to consult widely on the matter, including consultations with policymakers, as the decision had far-reaching implications.

While differences of opinion are inevitable in any sector, these examples highlight a lack of clear responsibilities in the procurement of new capacity. The narrowing of the FIT scheme and the adoption of the Renewable Energy Auction Policy should support improvements to this process, but even in enacting these policies clear responsibilities of stakeholders, and how these responsibilities link to the planning process is critical. An important additional aspect is the need for policies towards exports and imports to be firmly linked to planning processes and support the national capacity development and its subsequent operation.

A more detailed, but equally important aspect of demand risk related to the variable renewable energy (VRE) projects. For the VRE projects and including small hydro projects, KPLC takes on demand risk due to the take-or-pay nature of the contracts. This approach is standard international practice, with no change proposed. However, due to the risk entailed, it is critical that there are efficient planning and dispatch processes to minimize the risk of deemed energy payments in new and existing capacity. Refer to Report 3A: Summary of Procurement Findings for detailed findings.

3.3. Conditions Precedent on PPAs

Under the terms of reference, we were required to:

TOR 1: Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable Laws and or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.3. of this report.

Overall Findings

Based on our review of documents provided to support fulfilment of the Conditions Precedent (CPs), the following observations were made.

3.3.1 Lack of evidence for statutorily regulated conditions precedent

Statutorily regulated CPs highlighted on the PPAs for the scoped IPPs were either:

i. An electric power generation licence, an electrical power generation and distribution permit or electric power generation, distribution and supply permit.
ii. Water permits for the geothermal plants.
iii. Approval of the PPA by GOK.
iv. Approval of any waivers in the procurement process.

For the IPPs listed below, documents to support fulfilment of stipulated statutorily regulated CPs were not availed for review or we could not verify the validity of the availed documents. As

[26] Per Cabinet Despatch dated 28 February 2023, the President William Samoei Ruto, PhD, C.G.H chaired a cabinet meeting where the moratorium on PPAs was lifted.

highlighted under **Section 2 of Report 4: Condition Precedent on PPAs**, failure to fulfil statutorily regulated CPs has an impact on the legality of the PPA.

Table 31: Summary of Missing Documents that support the fulfilment of Stipulated Statutorily regulated CPs.

IPP	CP and observation
OrPower 4 Inc	• Geothermal Resource Licence - The Geothermal Resources Act, 1982 and supplementary legislation of 1990 requires a geothermal resource exploration license for such a project. This was not availed for review. • Water Permit - Section 50 of the Water Act, 1952, provides that a person must be authorised, through a permit, to construct a well or abstract any water from a well if such well is to be constructed or is situated within 100 yards of any body of surface water.
Thika Power Limited	• Generating Licence - The generating license was not signed by ERC's Director General - Engineer Kaburu Mwirichia and the Commission Secretary - Mueni Mutung'a. We could not verify the validity of this document.
Strathmore University	Generating licence – As noted under Section 2.8 of Report 3: IPP Selection Critera – Events Chronology, KPLC received energy produced from SU after the PPA between the two parties was executed (15 October 2015). A generation licence was however obtained by SU on 26 April 2017. This meant that SU generated power that was despatched to KPLC without meeting the statutory requirement of a generation licence. A revalidated PPA dated 03 August 2017 was subsequently entered by SU and KPLC. The revalidated PPA was not availed for our review at the time of compiling this report.

3.3.2 PPAs executed post the long stop effective dates

For the following IPPs, the target effective date and the long stop effective dates were observed to occur before the execution dates of the PPA. As noted under **Section 2 of Report 4: Conditions Precedent on PPAs**, certain parties' obligations on the PPA commence on the PPA signature date while others commence on the effective date, being the date when all conditions precedent are fulfilled or waived. Each PPA outlines the obligations that fall under either category. Terms on the PPAs indicate that the effective date occurs before the target effective date and the long stop effective date. Beyond the long stop effective date, the PPA is expected to lapse.

Table 32: Summary of PPAs executed post the long stop effective dates.

IPP	PPA execution date	Target effective date	Long stop effective date
Strathmore University	15 October 2015 (Annexure 1.3.6.8)	15 January 2015	16 July 2015
Power Technology Solutions Limited	12 June 2013 (Annexure 1.3.6.9)	01 December 2012	01 June 2013

Therefore, the effective date and the target effective date cannot precede the execution date, meaning a contract cannot be in effect until the parties sign it. The effective date is when certain obligations outlined in the contract begin. They cannot begin on an unsigned/unexecuted contract.

3.3.3 CPs with an economic impact on KPLC that materialized

This category refers to CPs whose fulfilment or lack thereof has a financial/economic implication on KPLC. From our review, two CPs were noted for which the financial implication risks materialized/may have materialized.

Table 33: Summary of CPs with an economic impact on KPLC that materialized.

IPP	Condition	Observation
LTWP	A grid connection agreement in relation to the connection of the plant to the transmission interconnector has been executed by LTWP and KETRACO and shall be in force and effect. (Annexure 1.3.6.4)	While an agreement was signed on 19 August 2013, delays in the fulfilment of obligations under the agreement led to deemed generated energy charges payable by GOK and KPLC. Details of how these charges arose have been highlighted on Section 2.4 of Report 3: IPP Selection Criteria – Events Chronology
Imenti Tea Factory Company Limited	The seller has paid to KPLC the sum of Kenyan shillings two million, five hundred thousand (KShs. 2.5 million) in respect of installation, testing and commissioning of the 11kv circuit breaker. (Annexure 1.3.6.17)	Documents to support fulfilment of this condition were not availed for review by the time of compiling this report.

3.3.4 Discrepancies in details in the PPA and approvals made

Differences were noted on the plant location and the contracted capacities between documents such as the PPAs, Board approvals, ERC approvals and EOI documents for Power Technology Solutions Limited (PTSL) as indicated in the table below:

Feature	PPA (Annexure 1.3.6.9)	Board Approval (Annexure 3.1.8.7)	ERC Approval (Annexure 3.1.12.34)
Location	Chinga Dam, along the Gachinga river in Othaya	-	Gikira River Kianjoro in Nyeri County
Wattage	514 kW	520	-

3.3.5 Some documents supporting fulfilment of conditions precedent in PPAs were not availed

Documents to support fulfilment of other CPs which were not statutorily regulated, were not availed by the date of this report (refer to Appendix 3). For these, performance of obligations by both parties past the long stop effective date would be argued to indicate that either party waived any unfulfilled CPs.

Recommendations
KPLC should ensure all CPs, including the statutory ones are met timely before contract execution. The wording on the effective date and the target effective date should be aligned to fall after the PPA execution when the inherent obligations begin. Further, project details across various documents integral to the PPA should aligned.

3.4. Beneficial Ownership and Contractors and Subcontractors Used

Under the terms of reference, we were required to:

- TOR 8: Establish the beneficial owners of the respective power plants and establish any linkages which may result to a conflict of interest.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.4 of this report.

3.4.1. Beneficial Owners

A beneficial owner is a natural person who ultimately (either directly or indirectly) owns or controls a legal entity or engagement. Given the influence these individuals have over an entity/engagement, there have been growing concerns at a global scale over the anonymity and/or concealment of such beneficiaries. The consensus has been that such anonymity and concealment may present opportunities for concealment of suspicious financial activity.

According to a report by the World Bank[27], the existence of regulatory loopholes in the disclosure requirements of beneficial ownership in one country have shown to have serious consequences at a global scale. Given that illicit financial flows are not limited within a given country, the common practice has been setting up companies in jurisdictions where privacy protection has the highest degree of consideration.

When the 20 IPPs that were scoped for this forensic audit were being contracted, Kenya did not have a framework governing collection and maintenance of beneficial ownership information. The Legal and Regulatory Framework governing disclosure of beneficial ownership in Kenya was only later introduced in July 2019 with the requirement for companies' disclosure of beneficial ownership information to the procuring entity being introduced in 2022. This means that KPLC was not obligated to collect and maintain a register of beneficial ownership within this period.

Among other benefits, collation, and maintenance of BO details during the contracting state would have enabled MOE, ERC, OAG and the management and Board of KPLC to:

- Identify potential conflicts of interest among the Board members, staff, shareholders and other stakeholders in the energy sector.
- Identify linkages between BOs of IPPs operating/proposing to operate power generation plants.
- Identify, manage, or mitigate potential anti-money laundering risk.

Following our assessments of the BOs of the 20 IPPs that were in scope, the following observations were made:

3.4.1.1. Undisclosed beneficial owners

As indicated in this Report 5 Beneficial Ownership, the following IPPs have undisclosed beneficial owners, the identification of which would require Government-to-Government engagement and interventions to overcome the foreign jurisdictions' legal restrictions on the access to that information.

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[27] https://thedocs.worldbank.org/en/doc/734641611672284678-0090022021/original/BeneficialOwnershipTransparency.pdf

Table 34: List of IPPs with Undisclosed Beneficial Owners

IPP	Jurisdiction of unidentified BOs
Iberafrica Power (E.A) Limited	United Kingdom
Thika Power Limited	British Virgin Islands
Orpower 4 Inc	United States of America[28]
Gulf Power Limited	Mauritius
Triumph Group Limited	British Virgin Islands and United Kingdom
Biojule Limited	Mauritius
Rabai Power Limited	Netherlands, United Kingdom
Lake Turkana Wind Power Limited	Mauritius, Netherlands, United Kingdom
Cedate Limited	Denmark, United Arab Emirates
Selenkei Limited	Denmark, United Arab Emirates
Hydro Project Services Peters Limited	Mauritius
Malindi Solar Limited	Canada, United Kingdom

Identification of the BOs would address whether any stakeholders in the energy sector and in the approval process (both within KPLC i.e. management and Board of directors and the Energy Sector-Ministry of Energy, Ministry of Finance and ERB/ERC/PRA) were conflicted as they participated in the PPA approval process and benefitted/continue to benefit from the PPAs awarded and the terms therein.

In addition, by leveraging on government systems and structures like the Directorate of Criminal Investigation (DCI) and the GOK Intelligence system, it can be established whether local beneficial owners per IPP as listed in this report, are indeed the shareholders of these entities or fronting for other undisclosed parties/shareholders.

Lessons can be learnt from the GOK intervention that was required (including the collaboration required within different GOK institutions and with the relevant international jurisdictions) on the handling of the case brought against Samuel K Gichuru (former MD for KPLC) and Chrisantus Okemo (former Minister of Finance of Kenya) and the results thereof.

3.4.1.2. IPPs with common shareholding

Table 35: IPPS with common shareholding

#	IPP	Search Date	Common Shareholders
1	Cedate Limited (Annexure 3.4.1.1)	01 April 2022	Frontier Energy II Alpha K/S Dlrad Energy Limited Frontier Energy II Beta K/S
	Selenkei Investment Limited (Annexure 3.4.1.2)	06 April 2022	
2	Rabai Power Limited (Annexure 3.4.1.3)	18 May 2022	Anergi Power Holdings Limited through its subsidiaries: Anergi Rabai Holding

[28] While Orpower 4 Inc is a subsidiary of a listed entity in the USA, Ormat , during the procurement process, it was indicated that it would have local investors in equity participation.

#	IPP	Search Date	Common Shareholders
	Lake Turkana Wind Power Limited (Annexure 3.4.1.4)	26 May 2022	Limited, Anergi Turkana Holdings Limited and Anergi Turkana Investment Limited
3	Iberafrica Power (E.A) Limited (Annexure 3.4.1.5)	19 April 2022	AP Moller Holdings through its subsidiary AP Moller Capital
	Thika Power Limited (Annexure 3.4.1.6)	19 April 2022	
4	Thika Power Limited Rabai Power Limited (Annexure 3.4.1.6 and 3.4.1.3)	16 May 2022	1. Thika Holding Limited

3.4.1.3. Variances in shareholding

We noted a variance in the list of shareholders and directors for Rabai Power Limited as per the File Perusal conducted on 18 May 2022 at the Companies Registry and the BO information provided by BRS on 03 June 2022 (Annexure 3.4.1.3) as outlined below:

Table 36: Variance in beneficial ownership of Rabai Power Limited

Company registry information		BRS information	
Name	Description	Name	Description
Soren Pilgaard Barkholt	Director/ Shareholder	Samer Nasr	Director/Shareholder
Daniel Robert Chestnutt	Director/ Shareholder	Sami Soughayar	Director/Shareholder
Andres Langhorn	Director/ Shareholder	Michael Doumet	Director
Rabai Power Holdings	Director/ Shareholder	Narendrabhai Bhailalbhai Patel	Director
Burmeister & Wain	Director/ Shareholder	Thika Holdings Limited	Shareholder

3.4.1.4. Conflict of interest

As highlighted under Section 2.2.5 of Report 5: Beneficial Ownership and Contractors Used, per the search conducted on 01 April 2022, Kenya Power and Lighting Company Limited Staff Retirement Benefits Scheme 2006 and the Kenya Power and Lighting Company Limited Staff Retirement Benefits Scheme (together referred as 'the Schemes') were listed as shareholders of Gulf Power Limited (Annexure 3.4.1.7). Our understanding is that the schemes comprise of active in-service employees who were employees of KPLC as of June 2006, deferred members of the Scheme and retirees of KPLC. Further, the main purpose of the Scheme is provision of cash benefits and pensions to the members upon attainment of the retirement age of sixty years, and where applicable, benefits for dependents of deceased members. Based on this understanding, it is our considered view that an award of contract to the schemes may create a conflict of interest for the KPLC staff and contravenes the provisions of the Public Officers Ethics Act, 2003.

Pursuant to Section 12 of the Public Officers Ethics Act, 2003 with respect to conflict of interest, a public officer is required to use his best efforts to avoid being in a position in whereby his personal interests' conflict with his official duties. Further, a public officer is required not to award a contract, or influence the award of a contract, to himself; a spouse or relative; a business associate; or a

corporation, partnership or other body in which the officer has an interest. This position was further buttressed in the case of Ethics and Anti-Corruption Commission v Moses Kasaine Lenokulal & another [2019] eKLR[29] where the court held that the County Governor influencing an award of a contract to an entity where he was the proprietor was in contravention with the aforesaid provision under the Public Officers Ethics Act. In addition, we noted that Section 16 of the Leadership and Integrity Act makes it clear that a State Officer must avoid situations where there is a possible appearance of conflict of interest. An award of contract to Gulf Power Limited where the Schemes are shareholders would therefore be deemed to create a conflict of interest.

3.4.1.5. Linkage between the BOs and KPLC staff, Board Members, and other stakeholders in the energy sector

Based on the information obtained from third party searches and the file perusals as of the date of compiling this report and observations made above, no direct links were established between the BOs of the IPPs with KPLC staff, Board Members, and other stakeholders in the energy sector.

However, by the date of compilation of this report, BO information requested through the OAG had not been received as highlighted in the report.

Results of confirmations received from government authorities in UAE, Guernsey, Mauritius and BVI may change conclusions that may be reached on the BOs of the various IPPs with foreign- listed shareholding as enumerated in the report above.

3.4.1.6. IPPs with shareholding with common addresses

The shareholders of IPPs with common physical addresses as per the third-party searches have been included in Appendix 5 below.

We propose the following key recommendations to be implemented by the OAG and by the management of KPLC with support of the KPLC Board of Directors.

Recommendations
The OAG follow up on BO information with relevant authorities in UAE, Guernsey, BVI and Mauritius. The Public Audit Act, Act No. 34 of 2015 empowers the Auditor General to conduct investigations on her own initiative with respect to activities by public entities. The Auditor General may examine the public procurement and asset disposal process of a public entity with a view to confirm whether procurements were done lawfully and in an effective way. Part of the scope of the forensic audit required us to identify the ultimate beneficial owners of the IPPs. As noted in Section 1.2.1 of Report 5: Beneficial Ownership and Contractors Used and across the report where results of the third-party searches have been included, some of the IPPs have been registered, or have shareholders registered in jurisdictions outside Kenya. With respect to IPPs or shareholders registered in UAE, Guernsey, BVI and Mauritius, the OAG should follow up on BO information with the relevant authorities as identified in the BO information disclosure request letters. Details of these letters have been included in Annexures 2 to 11 of Report 5: Beneficial Ownership and Contractors Used.

[29] http://kenyalaw.org/caselaw/cases/view/187129

Compliance with the Companies (Beneficial Ownership Information) (Amendment) Regulations, 2022

The GOK in complying with International Standards began legal reforms in 2021 to reveal individuals hiding behind the corporate veil of companies doing business with the government. These efforts culminated with the gazettement of the Companies (Beneficial Ownership Information) (Amendment) Regulations, 2022.

The 2022 Regulations require companies to disclose beneficial ownership information to the procuring entity, where the company participates in public procurement and assets disposal under the Public Procurement and Asset Disposal Act, 2015; or the contracting authority, where the company participates in a public private partnership arrangement under the Public Private Partnership Act. In addition, that beneficial ownership information maintained by the Public Procurement Regulatory Authority (PPRA) in the Government Portal, in relation to entities that have been awarded a tender by the procuring entity as part of contract award, be published and made publicly available.

KPLC must therefore ensure that the companies that participate in the public procurement and assets disposal under the above quoted act, or in public private partnership arrangements under the Public Private Partnership Act, disclose their beneficial ownership information. The extent of disclosure of beneficial ownership should extend to companies registered in Kenya or outside Kenya. Each IPP and its related companies irrespective of its country of incorporation should be bound to disclose beneficial ownership to the beneficial ownership minimum thresholds (i.e., shareholders holding at least 10%) envisaged under the Kenyan law.

Further, from a practical aspect, vide the Public Procurement Regulatory Authority Circular No. 02/2022 dated 08 April 2022, all procuring entities (including KPLC) commencing new procurement with effect from 21 April 2022 are required to incorporate the Revised Form of Tender & the Beneficial Ownership Disclosure Form as part of standard bid/tender documents.

Beneficial Ownership Information for companies contracted before 21 April 2022

The High Court in the case of Kenya Bankers Association v Attorney General & another; National Assembly (Interested Party) [2020] eKLR[30] held that, "legislation which is passed by Parliament should be applied prospectively unless it is expressly stated within the document that the legislation should be applied retrospectively." The Companies (Beneficial Ownership Information) (Amendment) Regulations, 2022 do not connote a retrospective application of the Regulations. Laws only apply retrospectively if they expressly state as such. In this case therefore, KPLC may require already contracted IPPs to provide beneficial ownership information on the strength of Regulation 13(7) of the Companies Regulations which provides that, *"Notwithstanding the provisions of this Regulation, the Government may seek, publish and publicise any important information regarding a company if such information affects the country"*. Therefore, since the identification of the BOs and the forensic audit of the IPPs is deemed a matter of national importance due to the escalating energy costs, GOK through KPLC may require already contracted IPPs to avail beneficial ownership.

Remedies for identified conflicts of interest.

As noted in observation (3.4.1.3) above, awarding a contract to Gulf Power Limited where the Schemes are shareholders (Annexure 3.4.1.7) is deemed to create a conflict of interest. Therefore, KPLC should seek further legal guidance to remedy the identified conflict of interest.

[30] http://kenyalaw.org/caselaw/cases/view/203253/

In compliance with the Leadership and Integrity Act, KPLC's Board and management must use best practices to avoid situations where personal interests conflict or appear to conflict with the state officer's or public officer's official duties. This includes awarding a contract to a pension scheme, company, partnership, or entity where the public officer may have conflict of interest.
Information promptly provided to ERB/ERC/EPRA Generating licences issued to the IPPs (Annexure 3.4.1.8 - 3.4.1.27) include conditions which must be fulfilled within the term of licence. One of these conditions highlights information which must be promptly provided with ERB/ERC/EPRA. Each licensee is expected to promptly notify the Board/Commission in writing in case of a change in the composition or structure of the shareholding of the licensee affecting the original or subsequent subscribers to the licensee's memorandum of association or any transaction with the effect of making a single person control five percent (5%) or more of the voting power at any general meeting of the licensee. KPLC should work with EPRA to identify the BOs of the IPPs based on the information that was provided when either of the events listed above occurred within the IPPs. If this information does not identify the BOs, it would be a step in the right direction in identifying entities owned/operated by the BOs.

3.4.2. Contractors and subcontractors for IPPs

Under the terms of reference, we were required to:

- TOR 7: Identify the contractors and subcontractors that supported developers and sponsors for each PPA.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.4 of this report.

As indicated in Section 2.2.4 above, our review of contractors and subcontractors used by the IPPs was limited to our own research and industry insights, review of various documents associated with this forensic audit, internet searches from credible sources, including the IPPs websites as applicable and review of the availed agreements between the IPPs and other parties.

To obtain a comprehensive and verifiable list of all contractors and subcontractors used, the IPPs, on KPLC's formal request and the IPPs' concurrence based on the provisions of their respective PPAs, would need to avail the information based on their internal company contract records and have the information certified for completeness by, for example, their external auditors or independent legal counsel.

KPLC and the IPPs would need to agree on the level of detail of information to be availed, where not expressly required per the existing PPAs, and which party would contract and/or meet the cost implications on any independent review or audit to confirm the completeness of the information prepared and submitted to KPLC.

3.5. Operational review of the IPPs

3.5.1. Price structure reviews

According to terms of reference, we were required to:

- TOR13: Perform a comparative analysis of procurement costs of energy from the IPP plants and against KenGen together with the resulting generation tariff.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.5 of this report.

The major price structures in PPAs should reflect a trade-off between the needs of the off-taker and the investor (IPP). For any investor in power generation, whether thermal or renewable, there is a need to recover all capital-related costs over the life of the asset, namely a return on capital and depreciation as well as operations and maintenance (O&M) costs. The capital-related costs are largely fixed in nature and hence any investor seeks certainty as to their recovery. There is also a need to recover ongoing O&M costs. While an off taker will seek the lowest price possible, it will also seek a contract that provides incentives to ensures that the plant is available, and that energy is generated as required and in an efficient manner.

The key price structures in the PPAs for the 20 IPPs in scope (Annexure 1.3.6.1 – Annexure 1.3.6.20) were reviewed against international practice to assess if improvements could be made that could benefit KPLC. The review considered the pricing structure by technology as the pricing arrangement generally varies by type of PPA. Below are the key observations on the price structure for each type of IPP:

Finding
PPAs for thermal IPPs The price structures for thermal IPPs appeared reasonable (Annexures 1.3.6.1, 1.3.6.3, 1.3.6.5 - 1.3.6.7). The tariff modelling undertaken to determine the breakdown of charges between fixed and variable components for each plant was not availed for review. However, if costs were allocated appropriately, for example, allocating all capital and fixed operating costs to the capacity charge, then no major issues would be seen.
Recommendations
A development that could be incorporated in future contracts could be provision of incentives when plant availabilities were greater than the stipulated 85% in the PPAs. In practice, in an auction process average availability can be a value proposed by the bidders, allowing a higher value to enter the PPA. For transparency purposes the recovery of the start-up cost on a case-to-case basis is preferrable. In case of a threshold in terms of numbers of start-ups, IPPs will incorporate the start-up cost for the unpaid start-ups in other tariff components, which has the tendency to increase the tariffs.
Finding
PPA for Geothermal IPPs The Orpower 4 units had a pricing structure based on a capacity charge and an energy charge (Annexure 1.3.6.2). This pricing structure was appropriate as it reflected the nature of fixed and variable costs involved in geothermal generation.

For all Orpower 4 units, inflation adjustments were provided on the capacity and energy components, with all the energy components subject to inflation adjustment, and 50% of the capacity components inflated each year. The share of adjusted and non-adjustment components of the capacity charges from year 11 was to change to 25% and 75% respectively. Full inflation adjustment to the energy component appeared reasonable. The adjustment to the capital component appeared high unless there were capital costs that were to some extent ongoing, potentially related to additional drilling.
Recommendation
For future PPAs it is recommended to split the capacity component in a capital cost recovery component and a fixed operation and maintenance cost recovery component, whereby the split must be cost reflective and will be determined by the IPP as part of its proposal. Cost reflectiveness must be proven in the financial model that must be provided by the IPP
Finding
PPAs for wind IPPs Kipeto Energy had a nominal fixed tariff over the full PPA period (Annexure 1.3.6.14) and LTWP had 14.3% of the tariff scalable by the US CPI (Annexure 1.3.6.4). Both approaches appeared reasonable. However, In the Kipeto Energy PPA, deemed energy payments were charged at the energy rate and levied on an estimate of the net energy output in the period of the deemed energy based on actual wind data by turbine and forecast performance. A similar approach was applied for LTWP. The Kipeto Energy PPA had provisions for penalties accrued when the plant's capacity availability fell below 80% over a six-month period. Similarly, for LTWP, penalties would be accrued when availabilities fell below 78% over a 3-month period.
Recommendations
The SCADA system in operation was designed to ensure that payments were adjusted for turbine availability. The estimation approaches need to ensure that interrelationships between turbines are fully captured and that shading (wake effects due to the presence of a wind turbine affecting the wind speeds in related turbines) and related factors are considered. The use of facility-based wind models as have been used to manage wind based PPAs in other countries could be developed and used in Kenya. For Kipeto, in practice, mandated availability is relatively low. For future contracts, proposed availability could be an evaluation variable in the tendering process.
Finding
PPA for Biojoule As for other technologies under the FiT regime, an energy-based charging mechanism is appropriate. 15% of costs in the Biojoule Kenya PPA (Annexure 1.3.6.11) were subject to inflation adjustment, reflecting an element of costs that were variable in nature. Deemed energy charges were levied at 70% of the energy charge rate.
Recommendations
A lower rate appears appropriate given that there are variable costs of generation that would be averted when production does not take place. It is however unclear why the 70% is lower than the total share of non-adjusted costs (85%) in the PPA.

PPAs for solar IPPs: For solar PV plants (Annexures 1.3.6.8, 1.3.6.12, 1.3.6.15 and 1.3.6.16), application of a fully energy-based charge which was used is a common international practice due to

the intermittent nature of output, which makes plants non-dispatchable and supports the use of take-or-pay energy-based contracts. The details vary across PPAs, though the aim is to reflect expected output in that period based on observed values of solar radiation in the deemed energy period and previous output. Ensuring that any payments for deemed energy are adjusted for previous plant performance is critical to ensure these payments are not inflated.

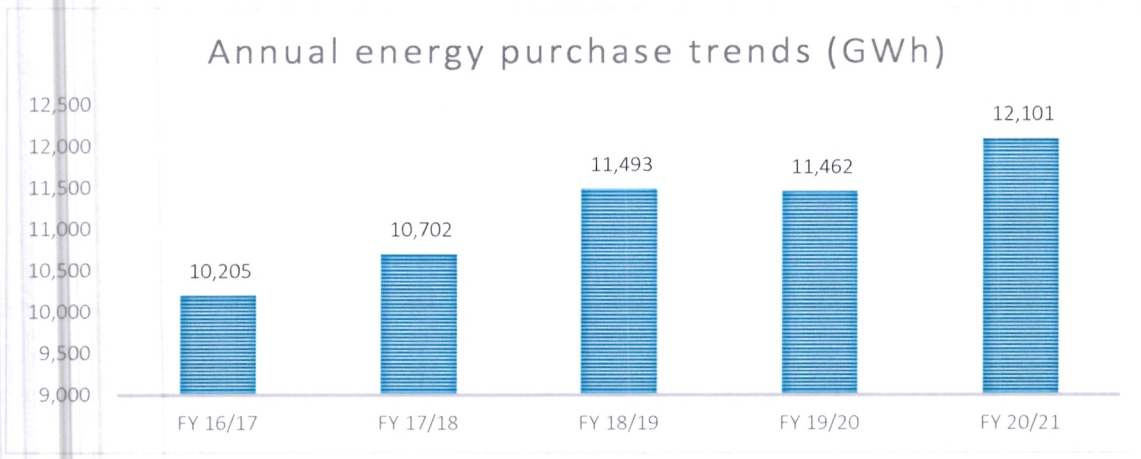
PPA for small hydro IPPs: The PPAs for all small hydro projects (Annexures 1.3.6.9, 1.3.6.10, 1.3.6.13, 1.3.6.18 1.3.6.19 and 1.3.6.20), except for Imenti Tea Factory (Annexure 1.3.6.17) were developed under the Feed in Tariff (FiT) arrangements. Unlike large hydro, small hydro plants are generally not dispatchable and hence output must be taken as produced. Therefore, providing a similar take-or-pay arrangement to that for solar PV and wind power plants was appropriate. Moreover, as the unit cost of a small hydro scheme can vary by several factors including water availability, flow, and head, setting a benchmark USD/kWh price at which the contracting agency (the Ministry of Energy/KPLC for the FIT arrangements) is willing to purchase energy allows for project proponents to set forward the most economic projects.

3.5.2. Energy Procurement

3.5.2.1. Energy cost analysis

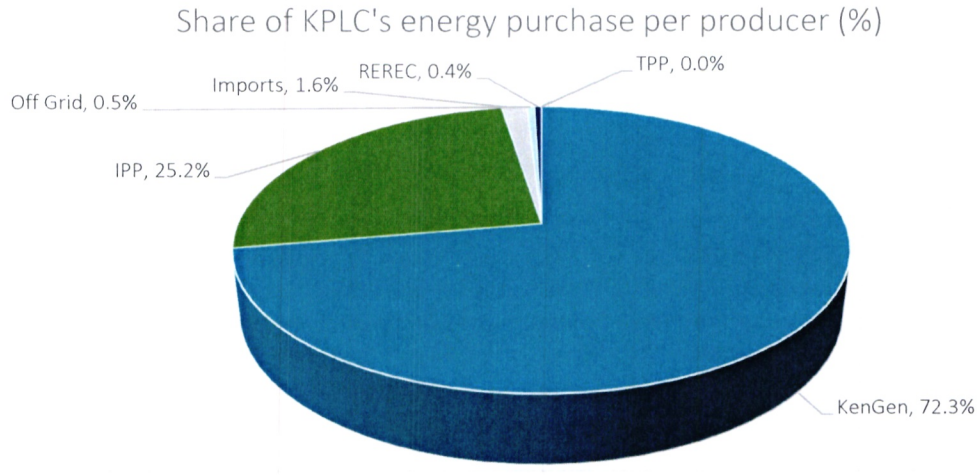
In the five financial years to 30 June 2021, KPLC purchased 55,963GWh of energy from the different producers of power (Annexures 1.3.6.21 - 1.3.6.30). During this period, the producers included KenGen, IPPs, off-grid power producers, temporary/emergency power producers, the Rural Electrification and Renewable Energy Corporation (REREC) and imports from Tanzania, Uganda, and Ethiopia. Below is a graphical representation of the energy share per energy producer, showing the predominance of KenGen to meet KPLC's purchase needs.

From the 2016/2017 financial year, the amount of energy purchased increased over the years with the only decline being experienced in the 2019/2020 financial year. The decline in this financial year could be attributed to the onset of the COVID 19 pandemic in the second half of the financial year.



Below is a graphical representation of the energy share per energy producer, showing the predominance of KenGen to meet KPLC's purchase needs.

3.5.2.2. Comparison of Power Purchase Costs from IPPs and Kengen



Power purchase costs from IPPs on average have been higher than those for KenGen. However, based on this observation is not possible to conclude that the price difference reflects fundamental problems in the purchasing arrangements for IPPs for several reasons:

Finding
As indicated in Sections 1.2.1 and 3 of Report 6: Operational Review of IPPs, power purchase costs from IPPs on average have been higher than those for KenGen. However, based on this observation it is not possible to conclude that the price difference reflects fundamental problems in the purchasing arrangements for IPPs without the following considerations: Different technologies – A key reason why the costs of purchases from KenGen are lower is the affordability of largescale hydro production. Almost half of the purchases from KenGen are from large hydro plants at a cost of little above 2 US cents/kWh. These plants are heavily depreciated, have low operating costs and do not have an equivalent in the IPP portfolio. At the same time, the technologies developed under the FiT arrangements by IPPs (solar PV, wind, small hydro) are generally underrepresented in KenGen´s portfolio. In cases where there is common technology, for example thermal plants, the average cost of production is not notably different. Concessional finance and the cost of capital - Several KenGen assets have been financed using concessional finance, which is not generally available to IPPs. Using this concessional finance, KenGen´s cost of capital may be lower than that of a private investor, and an international private investor looking to develop power generation projects in the country. The cost of capital has an impact on the negotiated tariff of a plant. There has however been a shift in the recent times where multinational development banks are now less willing to lend to state entities for power generation projects than previously. This may indicate that the option of KenGen developing new capacity at lower financing costs will generally not be available across all technologies. Common construction periods - A more decisive comparison would be that of KenGen and IPP plants contracted with similar capacity and of the same technology. For example, KenGen´s geothermal portfolio dates from as far back as 1981 and while there have been recent developments at Olkaria. A geothermal power plant has very site-specific site development costs and yield factors that also would need to be considered in any comparison. Given difficulties in comparison, a more appropriate question would be to consider if the IPP procurement could have been more effective and occurred at lower costs, which is the focus of other reports submitted under this review
Recommendation

Procurement of all new capacity should be through competitive procurement processes. KenGen should be allowed to participate in these processes.

3.5.2.3. IPP power purchase analysis review

Capacity charges paid to the IPPs in the five years to 30 June 2021 amounted to KShs. 109.7 billion. KPLC paid KShs. 63.6 billion to the IPPs in the five financial years, being energy charges for the plants' net electrical output (NEO) compared to capacity charges of 109.6 billion. Of this NEO amount, KShs. 40.4 billion (63.5%) was paid for energy procured from the LTWP plant.

The table below shows that KPLC procured low amounts of energy from the plants while paying them for the capacity that they could generate in the period.

Table 37: Summary of IPP power purchase analysis review

IPP	Plant type	Capacity Charges KShs '000	% Share of total IPP capacity charges	Energy Charges Ksh '000	% Share of total IPP energy charges
OrPower 4	Geothermal	42,405,051	39%	14,726,126	23.15%
IberAfrica	Thermal	12,414,511	11%	698,499	1.10%
Rabai	Thermal	12,047,377	11%	1,649,838	2.59%
Triumph	Thermal	11,806,910	11%	178,303	0.28%
Tsavo	Thermal	10,617,825	10%	894,189	1.41%
Thika	Thermal	10,402,278	9%	631,982	0.99%
Gulf	Thermal	9,992,913	9%	186,364	0.29%
LTWP	Wind	-	0.%	40,431,768	63.57%
REREC	Solar	-	0%	1,366,244	2.15%
Regen Terem	Small hydro	-	0%	931,205	1.46%
Kipeto	Wind	-	0%	1,088,846	1.71%
Imenti	Small hydro	-	0%	16,738	0.03%
Metumi	Small hydro	-	0%	118,221	0.19%
Mumias	Thermal*	-	0%	25,842	0.04%
Gikira	Small hydro	-	0%	73,599	0.12%
Biojule	Biomass		0%	20,922	0.03%
Chania	Small hydro	-	0%	31,874	0.05%
Gura	Small hydro	-	0%	507,313	0.80%
Strathmore	Solar	-	0%	5,108	0.01%
Selenkei	Solar	-	0%	4,473	0.02%
Kianthumbi	Small hydro	-	0%	4,098	0.01%
Total		109,686,866	100%	63,601,552	100%

Data source: Energy payment schedules shared by KPLC between 13-15 May 2022 (Annexure 1.3.6.21 – Annexure 1.3.6.30).

On review of KPLC's dispatch procedures at the National Control Centre (NCC), Kipeto 1 and LTWP 1 appeared at the top of the merit order. This meant that the two plants were given utmost preference

for dispatch compared to the other plants, which is consistent with their take-or-pay contractual status.

3.5.2.4. Fuel payments

In the five-year period to 30 June 2021, KPLC paid KShs. 99.4 billion in fuel costs to the power producers. The largest share of the fuel costs (45%) was taken up by the IPPs with KenGen taking up 38%. 'Others' refer to fuel costs paid to Aggreko and the off-grid power producers while 'imports' refer to payments made to Uganda Electricity Transmission Company Limited (UETCL).

Table 38: Percentage of fuel costs to the IPPs over five-year period to 30 June 2021

Power Producer	Fuel costs KShs '000	% Share of cost
IPP	44,352,915	45%
KenGen	37,913,137	38%
Others	9,367,035	9%
Imports	7,794,445	8%
Total	99,427,532	100%

Data source: KPLC's audited financials for the five financial years (Annexure 3.5.2.1 – Annexure 3.5.2.5).

An analysis of the cost of fuel for every unit of energy generated showed that the off-grid power plants were seen to have the highest costs of fuel for every unit of energy generated. This may be due to greater inefficiencies of KenGen plants or an influence of the start-costs.

Table 39: Cost of fuel for every unit of energy generated by thermal plants

		Cost of fuel for every unit of energy generated by thermal plants					
Power Producer	Plant Location	FY17 (KShs/ MWh)	FY18 (KShs/ MWh)	FY19 (KShs/ MWh)	FY20 (KShs/ MWh)	FY21 (KShs/ MWh)	Average
Off-grid power stations	Various	36.07	35.70	31.29	35.20	35.32	34.72
Kipevu I	Mombasa	*NA*	*NA*	*NA*	11.90	11.22	11.56
Kipevu III	Mombasa	*NA*	*NA*	*NA*	11.80	11.00	11.40
Muhoroni GT 1	Nyanza	*NA*	*NA*	*NA*	34.64	33.24	33.94
Embakasi GT 2	Nairobi	*NA*	*NA*	*NA*	-	-	-
Ave. for KenGen plants	Various	12.03	10.84	13.90	14.88	14.93	13.32
Gulf	Nairobi	12.49	17.84	23.10	12.97	14.25	16.13
Thika	Nairobi	13.12	10.76	12.66	13.07	10.99	12.12
Iberafrica	Nairobi	9.89	10.97	13.44	12.32	11.22	11.57
Triumph	Nairobi	10.61	11.56	19.56	12.61	10.86	13.04
Rabai	Mombasa	8.81	9.17	11.09	8.70	8.98	9.35
Tsavo	Mombasa	11.97	9.85	11.33	10.91	8.76	10.56
Average for the IPPs	-	11.15	11.69	15.20	11.76	10.84	12.13
UETCL	Uganda	14.64	14.62	16.08	0.00	0.00	15.11

Data source: KPLC's audited financials for the five financial years (Annexure 3.5.2.1 – Annexure 3.5.2.5) and energy purchase schedules shared by KPLC between 13-15 May 2022 (Annexure 1.3.6.21 – Annexure 1.3.6.30).

Of the four thermal IPPs, Gulf had the highest average cost of fuel for every unit of energy generated in the five years. In FY19, Gulf's and Triumph's average fuel cost for every unit of energy generated was almost double that of Thika Power, a plant within the same location. As these plants are within the same location, differences in average fuel costs may reflect greater plant efficiency of Thika and a greater influence of start-up costs at Gulf and Triumph given limited dispatch in this year.

3.5.2.5. Energy to cost analysis.

For the energy to cost analysis, we used the FY20 and FY21 statistics from KPLC's audited financial statements for FY21 (Annexure 3.5.2.1). The statistics of the energy purchased and cost analysis per plant was used to compare unit energy costs between KenGen and the IPPs. The analysis was performed per type of plant (thermal, geothermal, wind, and/or small hydro). Only nonfuel costs were used in the analysis:

Geothermal:

The unit energy cost for IPP owned plants was higher compared to that of KenGen owned plants. However, for geothermal power, costs can vary significantly by site due to differences in production and development costs and site yields. Moreover, most of the assets at Olkaria were developed using concessional finance, with some units highly depreciated (e.g., Olkaria I and II). These factors mean that care needs to be taken in drawing conclusions based on a simple comparison of average costs.

Table 40: Comparison of Unit Energy Costs for Geothermal Power Plants owned by IPPs to KenGen

Power Producer	Financial Year	Total nonfuel costs KShs '000	Energy purchased (MWh)	Ratio
KenGen	2020/2021	27,481,369	4,052,878	6.78
	2019/2020	21,788,356	3,330,670	6.54
IPP	2020/2021	11,895,495	980,815	12.13
	2019/2020	12,462,373	1,075,877	11.58

Data source: Energy purchase schedules shared by KPLC between 13-15 May 2022(Annexure 1.3.6.21 – Annexure 1.3.6.30) and audited KPLC financials for FY21 (Annexure 3.5.2.1).

Thermal Power

IPPs are seen to have a higher cost to energy (KShs. /MWh) ratio. It is important to note that:

- The nonfuel costs used in this comparison are inclusive of capacity charges and adjustments such as foreign exchange (forex) charges.
- Within the two financial years, KenGen had four operational thermal plants with an effective capacity of 231 MW while there were six operational thermal IPP plants with an effective capacity of 465 MW.

Table 41: Comparison of Unit Energy Costs for Thermal Power Plants owned by IPPs to KenGen

Power Producer	Financial Year	Total Nonfuel Costs KShs '000	Energy Purchased (MWh)	Ratio
KenGen*	2020/2021	3,611,862	245,331	14.72
	2019/2020	3,275,577	198,834	16.47
IPP	2020/2021	14,415,819	629,972	22.88

Power Producer	Financial Year	Total Nonfuel Costs KShs '000	Energy Purchased (MWh)	Ratio
	2019/2020	13,305,862	542,914	24.51

Data source: Energy purchase schedules shared by KPLC between 13-15 May 2022(Annexure 1.3.6.21 – Annexure 1.3.6.30) and audited KPLC financials for FY21 (Annexure 3.5.2.1).

For the IPPs, the nonfuel costs were excluded in the calculations. The unit costs of thermal energy were observed to be similar (an average of 1.1 KShs per unit kWh of energy), which is as expected as large proportion of these costs would be local labour and consumables. The most notable feature of the table is the preponderance of capacity charges in aggregate. While the average non-fuel variable costs are similar across plants, the average costs (including fuel) show important differences. This is reflected in the capacity load factors for each plant, which are set out in Table 27 of Report 6 – Operation Report. Key observable trends include the significant reduction in the load factor of both the KenGen and IPP diesel plants over the five-year period, and the limited dispatch of the costliest units (Gulf, Triumph).

Overall, in 2021, thermal plants were responsible for 7.2% of energy volumes purchased by KPLC but 31% of purchase costs, indicating a significant relative cost burden. Roughly two-thirds of the costs reflect capacity and non-fuel energy costs, indicating limited scope to reduce overall thermal purchase costs during PPA lifespans given the low existing load factors.

A reduction in the capacity charges would reduce almost on a one-to-one basis the total nonfuel cost incurred by KPLC from the thermal plants. However, the capacity charge is designed to recover the fixed cost of construction and operation of the plant by the IPP. This means that while a reduction in capacity charges would impact the retail prices of power sold to the consumers, it would also affect the ability for IPPs to recover legitimate costs.

Wind power

For wind power plants, the energy generated by IPP plants is far greater than that produced by KenGen plants. Notwithstanding huge differences in scale, we performed an energy to cost analysis for KenGen owned plants (Ngong II and Ngong PH II) versus that of IPP owned plants (LTWP and Kipeto). The unit cost of the IPP plants in FY20 solely reflects payments to LTWP, which consisted of non-fuel costs and payments for deemed generated energy. A higher average charge for the IPP plants in FY21 reflects the introduction of the Kipeto plant at a FiT-determined tariff of US dollar 0.12/kWh, and additional deemed energy charges for LTWP in FY21.

Table 42: Comparison of Unit Energy Costs for Wind Power Plants owned by IPPs to KenGen

Power Producer	Financial Year	Total nonfuel costs KShs '000	Energy purchased (MWh)	Ratio
KenGen	2020/2021	391,531	39,360	9.95
	2019/2020	313,508	33,930	9.24
IPP	2020/2021	18,475,208	1,646,883	11.22
	2019/2020	12,241,957	1,237,460	9.89
IPP less estimated LTWP DGE	2020/2021	16,764,744	1,646,883	10.18
	2019/2020	11,040,865	1,237,460	8.92

Data source: Energy purchase schedules shared by KPLC between 13-15 May 2022(Annexure 1.3.6.21 – Annexure 1.3.6.30) and audited KPLC financials for FY21 (Annexure 3.5.2.1).

Small Hydro Plant (SHP)

The table below shows that KenGen plants have a slightly lower unit energy cost compared to IPP owned plants.

Table 43: Comparison of Unit Energy Costs for Hydro Power Plants owned by IPPs to KenGen

Power Producer	Financial Year	Total Nonfuel Costs KShs '000	Energy Purchased (MWh)	Ratio
KenGen	2020/2021	243,105.00	29,747.57	8.17
	2019/2020	270,928.00	31,307.81	8.65
IPP	2020/2021	476,278.00	50,275.94	9.47
	2019/2020	526,308.91	56,615.58	9.30

Data source: Energy purchase schedules shared by KPLC between 13-15 May 2022(Annexure 1.3.6.21 – Annexure 1.3.6.30) and audited KPLC financials for FY21 (Annexure 3.5.2.1).

3.5.3. Invoice and Payment Process Review

Under the terms of reference of this forensic assignment, we were required to:

TOR 3: Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.5 of this report.

Below are the key observations and recommendations following a review of the invoicing and payments process which including re-computation of paid invoices per plant type:

Finding

Thermal – Invoice review for Rabai – May 2021 (Annexure 1.3.6.33)

We recomputed based on the supporting data provided in the appendices of the invoice of May 2021. It was however noted that the with regards to the scheduled maintenance: Only the approved maintenance plan for 01 to 10 May 2021 was included in the annexure 4 and considered in computation of monthly target availability. The maintenance plan for period between 11 to 31 May 2021 was not considered in the computation.

Capacity charges:

- The capacity charge was calculated according to formulas in Schedule 6 of the PPA (Annexure 1.3.6.3), that is, the sum of the non-scalable and scalable CCR (18.5018 EUR/kW) was multiplied by the contracted capacity of 89.670 kW. The applied values except for the CCSD could be reconciled. The charge for contracted capacity, however, was not clear. Rabai used the test result from the contracted capacity from January 2021(Annexure 1.3.6.34) in the computation on the May 2021 invoice, although higher test values (up to 90 MW) had been approved in March 2021 (Annexure 1.3.6.35).

Monthly Target Availability Analysis for Rabai – May 2021:

- According to the PPA (Annexure 1.3.6.3), monthly availability had a direct impact on capacity charges if the availability dropped below 80% for a period of six months. In case the yearly average capacity availability exceeded 85%, 45% of this was to be regarded as excess capacity and may be used to offset capacity failures in the following 3 years. Gross annual availability was

calculated for 90 MW capacity in the 2020/2021 and 2021/2022 maintenance plans. Re-computation of monthly target availability showed the following variations:

Parameter	Invoice	Basic document/PPA	Observations
SMAh (Scheduled maintenance allowance hours)	246 hrs and 4,100,820 kWh noted 45.56 hrs for contracted capacity of 90 MW applied in calculation	144.28 hrs in approved maintenance plans, resulting in 12,985,160 kWh	• 2 maintenance plans must be considered since both end on May 10th. In the invoice, the planned maintenance values for 11-31 May 2021 were not considered.
USMA (Unscheduled maintenance allowance)	7,068,005 kWh	4,045,936.56 kWh	• USMA: 2 maintenance schedules were considered and weighted per respective days of the month
MTA May (Monthly Target Availability)	55,545,655 kWh	49,928,903.44 kWh (using complete May 2021 maintenance plan)	• Significant deviation resulting in reduced target availability from longer scheduled maintenance in May 21 than considered in invoice data.

- The split of maintenance plans led to errors in the computation of the monthly target availability in May 2021 invoice for Rabai. A deviation from the formula on the PPA was noted on the invoice for USMAp where the yearly rather than the monthly formula was used.
- The calculation of USMA did not follow the formula provided on the invoice (which is the formula for the yearly USMA, not the monthly). The invoice revalidation computation provided by KPLC resulted in 4,045,936.56 kWh instead of 7,068,005 kWh as included in the invoice.
- The source of the data in the May invoice on which daily availabilities were presented (246 hrs, 4,100,820 kWh, 7,068,005 kWh) was not clear. It was unclear whether KPLC used documents/data from the National Control Centre (NCC) and which party provided the data.

Excess start charges computation analysis for Rabai – May 2021:

- Only 150 starts per year were not counted as "Excess Starts". This value appears very low for a plant of 5 Diesel Generators (DG), especially since DG were used to balance for Variable Renewable Energy (VRE) generation.

The following documents supporting the invoice were incomplete:

- Contract capacity: A document proving the contract capacity to be used for the capacity charge (CCSD) was not included.
- Scheduled Maintenance: Only the approved maintenance plan for 01 to 10 May 2021 was included and considered in computation of monthly target availability. The maintenance plan for period between 11 to 31 May 2021 was not considered in the computation.

Recommendation

- Splitting a financial year as observed on the May 2021 invoice for the Rabai plant is not practical. Best practice would be starting any new period at the beginning of a month, and preferably at the beginning of a quarter (e.g., January, April, July or October). With such a split, the re-computation

of the availabilities and the maintenance allowance may be susceptible to computation errors as noted on the May 2021 invoice for Rabai.

- Considering that the Rabai plant has 5 diesel generators which are used to balance the variable renewable energy generation, which is rather intermittent, setting the 'excess starts' to commence only after 150 starts appears to be considerably low. With the intermittency of the renewable energy sources, the generators are bound to have a higher number of starts in a year. However, care should be taken during PPA negotiation not have the unpaid starts-up costs included in other tariff components. Cost benefit analysis can be done to compare the current approach versus negotiating a fee for each start-up.
- All invoice calculations inputs should be specified and supported by documents accompanying invoices for ease of cross-referencing.

Finding

Geothermal – Invoice review for Orpower 4 May 2021 (Annexure 1.3.6.36)

The invoice structure complied with the PPA (Annexure 1.3.6.2) schedule Appendix D setting out all required administrative data The invoice comprised of energy charges, capacity charges and royalties.

Energy Charge:

- The energy charge computation was calculated according to the formulas in Section 11 of PPA 15.5 and Schedule 5 of the appendices. The applied values could be reconciled from the metering data. However, for plant 1 and plant 3, there was no daily dispatch or NEO data available from the NCC to cross-validate the meter readings.

Capacity Charge:

For plant 1 share G, the COD of plant 4 was applicable according to the provisions of PPA 15.5 (Annexure 3.5.3.1) and PPA 15.6 (Annexure 3.5.3.2), which implied that plant 1 share G would change to period 2 on the 11th anniversary of plant 4's COD (January 2016). Given the COD date for plant 4, the first period parameters were applicable. The deviation of the CCR for plant 1 share G depends on the fact that the 11th anniversary of plant 4 COD had not occurred as of May 2021, going by the FCOD timelines included on (Annexure 3.5.3.3). Going by this assumption, the following errors in calculation by OrPower 4 and KPLC's acceptance were noted which could be attributed unavailability of crucial data required for reference (plant COD details) during the invoicing process. The error places the IPP at a disadvantage.

Parameter	Invoice	Basic document/PPA	Observations
Contract Capacity (CC)	63.8 MW	PPA 15.6 58 MW CC Test: Dec. 2020 63.8MW	The option to increase the capacity was not outlined in PPA 15.6 (Annexure 3.5.3.2)
Percentage of non-scalable rate	Period 2: 75%	Period 1: 50%	The invoice of plant 4 applied period 1 share (50% and 50%) while plant 1 share G applied period 2 share (75% and 25%). With the change of period for share G being related to FCOD of plant 4, period 1 share should be applied in plant 1 share G's invoice.
Percentage of scalable rate	Period 2: 25%	Period 1: 50%	
Fixed share of CCR	32.84 USD/kW/month	21.89 USD/kW/month	Deviation due to application of period 2 share as noted above.

Scalable share of CCR	13.37 USD/month	26.74 USD (May)	Deviation due to application of period 2 share as noted above.
Capacity Charge Rate CCR in May 2021	46.21 USD/kW	48.63 USD/kW	Deviation due to application of period 2 share as noted above.

During invoice verification KPLC adjusted payments according to a different, albeit potentially consistent, methodology for each invoice. Since the PPA did not set clear provisions on how to apply the accumulated availability factor, another method of calculating the final capacity charge and with this, a different payment obligation could have been intended when the PPA was developed. This point reinforces the complexity in the capacity charge calculation for OrPower4.

Recommendation

A clearly defined calculation methodology for capacity adjustment, with review and amendment of the accumulated availability correction factor required should be documented.

Finding

Wind – Invoice review for Lake Turkana Wind Power Ltd – May 2021 (Annexure1.3.6.37)

Energy Charge:

- The energy charge for LTWP billed to KPLC reflected a combination of the base energy charge provided in the PPA dated 13 May 2013 (Annexure 3.5.3.4), and the definition of CPI for the European Union. The index applied was the Harmonised Index of Consumer Prices (HICP) (Annexure 1.3.6.40), which was based on the 2015 rate of 100. The current published value for December 2008 was 90.01, which was lower than the base value in the PPA of 108.77. Hence published values needed to be multiplied by the factor 108.77/90.01 for comparability purposes.

KPLC requested for an adjustment for "Forecasting Excess NEO" of 466.67kWh. The amount of Forecast Excess NEO should have been higher based on KPLC dispatch data.

According to the dispatch data, the following Forecasting Excess NEO events occurred at the following dates and times:

- 15 May 2021 – 03:30 to 04:00 – 4.47MW
- 18 May 2021 – 00:30 to 01:00 – 0.03MW
- 18 May 2021 – 21:00 to 21:30 – 0.40MW
- 20 May 2021 – 02:30 to 03:30 – 0.50MW

In total, the dispatch data suggests an adjustment of 2,700kWh (5.4MW divided by 2 for the half hourly intervals). This would have been the appropriate value instead of the 466.67kWh applied – resulting in a reduction in the invoice of €268.22 (inc. VAT), roughly €222 higher than the €45.88 made, which only related to events on 18 May 2021 and exclude those on 15 May and 20 May 2021. While the amounts were not major, they indicate a potential lack of controls and checks, including within KPLC on the adjustments that were necessary, and in communicating this data to LWTP for this to be adjusted on their original invoice.

LTWP was liable to small forecasting penalties in May 2021 for under-forecasting. The same data showed that on average, LTWP forecasted capacity was 20% above that generated. However, no penalties were included for over-forecasting. Over-forecasting may distort the energy dispatch processes at the NCC.

Recommendation

Due to provisions on forecast deviations only providing penalties in the case of overperformance, in general the strategy of the power generator was to forecast well above expected capacity. To address this issue, it is recommended that KPLC develops a more balanced concept of forecasting, which includes impacts on generators' payments.

Finding

Solar PV – Invoice review for Strathmore University – May 2021 (Annexure1.3.6.38)

The invoice structure was set out as per the requirements on Appendix D of the PPA dated 15 October 2015 (Annexure 1.3.6.8). All the administrative data was in the invoice. The invoice was fully energy based, hence included the NEO, the tariff rate, and the payable amount, with and without VAT. The Strathmore University PPA did not include provisions for deemed energy.

The following exceptions were noted:

- Images of the main and backup meter readings were not available for May 2021 but were available for other invoices provided for Strathmore.
- The energy charge rate on the invoice billed to KPLC was $0.12/kWh but the calculation applied suggested that a higher value was used ($0.121205/kWh) and that the written value of $0.12/kWh reflected the rounded rate. This energy charge rate used in the invoice was also different from that included on signed PPA dated 15 October 2015 (Annexure 1.3.6.8) of $0.121051/kWh. The PPA stated that an amount of $0.1104/kWh was fixed, while the remaining $0.0096/kWh was adjustable by the all-urban consumers (CPI U) index of the US Department of Labour (base data 1982-84 = 100), whose base value for April 2014 was 237.072 (Annexure 1.3.6.41).
  Based on our estimates of the tariff rate, Strathmore University charged $0.53 (excluding VAT) more than appears appropriate. Per clarifications received from KPLC on 24 June 2022, the base CPI was set as 233.707 on the PPA dated 22 November 2017. With this version not being availed for our review by the time of compiling this report, this base CPI could not be verified. Therefore, the following concerns were noted:
  - ✓ Failure to include key PPA parameters (CPI base value) on the invoice.
  - ✓ Lack of transparency and detail over the calculations of the charge rate.

Given the invoices above had been paid with concerns highlighted above, this may be indicative of an invoicing process without sufficient checks and rigor.

Recommendation

- Images of the main and back up meter readings should be attached for each invoice submitted to KPLC for payment for validation.
- All invoice calculations inputs should be specified in the documents accompanying invoices for ease of cross-referencing. An extract of the respective PPA showing the energy charge rate for example can be attached and the PPA version relied upon specified. Further, KPLC should ensure necessary invoice computations and done are reviewed by an independent person within the energy purchase department for accuracy before recommending the invoices for pay out.

Finding

Small Hydro – Invoice review for Chania – May 2021 (Annexure 1.3.6.39)

The invoice structure was set out as per the requirements of appendix D of the PPA dated 27 October 2014 (Annexure 1.3.6.18). The invoice set out all the required administrative data. With Chania being an energy-based plant, the invoice also specified the NEO, the tariff rate and the amount payable, with and without VAT. The invoiced amounts could be approximated based on the NEO and values in the PPA. However, the following exceptions were noted:

Energy Charge:

- The NEO was derived as the difference between meter readings taken at the start and end date of the month, with the readings validated by the IPP and KPLC representatives. Images of the main and backup meter readings were not provided with the invoice. However, signed meter reading sheets by representatives from KPLC and Chania were attached to the invoice.
- The energy charge on the invoice billed to KPLC was $0.104/kWh but the calculation applied suggested that a higher value was used ($0.10442). The rate $0.104/kWh on the invoice therefore seemed like a rounded figure.
- Based on our computation of the charge rate, using applicable CPIs, the tariff rate used understated the bill by $30.66 (excluding VAT) or 0.26%. Per clarifications received from KPLC on 24 June 2022, the base CPI was set as 244.733 on the PPA dated 25 May 2017. With this version not being availed for our review by the time of compiling this report, this base CPI could not be verified.

Recommendation

- Images of the main and back up meter readings should be attached for each invoice submitted to KPLC for payment for validation.
- There is a need more clarity on the basis for the energy charge rate applied (basis and methodology of computation) which should accompany the invoice submitted for payment, and further validated by KPLC.

Finding

Biogas – Invoice review for Biojoule – May 2021 (Annexure 1.3.6.42)

The Biojoule invoice of May 2021 structure complied with the requirements on schedule appendix D of the PPA dated 25 January 2016 (Annexure 1.3.6.11). With this being an energy-based plant, the invoice also specified the NEO, the tariff rate and amount payable - with and without VAT. We recomputed the figures in the invoice and noted the following exceptions:

Energy Charge:

- The energy charge computation was calculated according to the formulas in section 6 of the PPA and Appendix B of the schedules. The applied values could be reconciled from the metering data. However, for Biojoule there was no daily dispatch or NEO data available from the NCC to cross-validate the meter readings.

- Per the energy dispatch schedules, KPLC indicated 39,146 kWh as the energy dispatched during the month. However, a daily and half-hourly validation of this value from NCC data was not possible due to the absence of verified dispatch data.

Recommendation

KPLC in their review of the invoices prior to submission to finance for payment should confirm the NEO in the invoice against the NEO data available from the NCC for confirmation of accuracy.

KPLC's energy purchase - bulk energy invoice verification document (KP/3C.1/QMS/OP/05) (Annexure 1.3.6.32) described the invoice verification process and outlined requisite information for the verification process. We however noted that there were no substantial rules for the verification process itself and on the quality of data/documents to be used. An escalation process was not described for cases where disputes on the invoices could not be solved during the verification process. No references were made to the dispute resolution processes outlined in the PPAs. The flow chart included on the procedural document also required amendments/updates. It was noted that in the process map on Appendix 1 of the document, invoices with unresolved disputes were to be "forwarded to finance for undisputable amounts" (process document wording) without stating remediation actions for disputed amounts.

Overall, the IPP invoice review and approval process seemed to rely on attached documents/ results. Obvious failures in these documents attached as appendices to the some of the invoices like incomplete documentation or non-alignment with were not marked as such. There is therefore a need for rigor in the review process and a second reviewer independent of the first reviewer. Requisite invoice review process guidance should be developed including a clearly defined calculation methodology for capacity adjustment, with review and amendment of the accumulated availability correction factor required should be documented. While no systematic bias in invoicing was identified, greater reliance on automated procedures with application of greater cross-checking of values will reduce invoicing risk and provide greater credibility in the payment processes.

3.5.4. Performance assessments

According to terms of reference, we were required to:

TOR 12: Ascertain the capacity discharged by various plants in comparison with the expectation of the respective PPAs for at least the last 5 years.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.5 of this report.

Thermal and Geothermal

At the time of this review, KPLC held PPAs for six thermal power plants, five of which were based on diesel generators (Annexures 1.3.6.1, 1.3.6.3, 1.3.6.5, 1.3.6.6, 1.3.6.7) and the sixth was a geothermal PPA (Annexure 1.3.6.2). The PPAs for the Diesel thermal power plants typically contained three key performance indicators: Plant Capacity; Availability; Fuel Consumption.

Key observation noted was with respect to plant capacity, Triumph Power and Rabai Power failed to achieve the contracted capacity at the signature date (Triumph Power in 2019, 2020 and 2021 (Annexures 1.3.6.43 - 1.3.6.45); Rabai Power in 2020 (Annexure 1.3.6.34). In these cases, for dispatch and invoicing purposes, the CCSD was applied. The availability varied with Gulf Power showing high availability figures compared to Rabai Power, and Triumph Power (Annexure 3.5.4.1). Fuel consumption values were included in the PPAs following a competitive tendering process, and all were in a very close range compared to each other.

Geothermal Power Plant (OrPower4): There were contracted capacity variations for the plants for OrPower plants 1, 2 and 3. No documentation was provided for review, confirming approval of changes to the PPA or consideration by the Board.

The PPAs for the thermal power stations did not contain any monitoring rights for KPLC during construction and operation. They also did not include obligations for the IPP to provide any reports on financial and technical performance on a monthly and/or annual basis, although this is quite common in international practice. However, KPLC also had the following tools at hand to enforce performance of the IPPs in respect to achieving KPIs as well as the dispatch instructions:

- Test of Contracted Capacity at Signature Date (CCSD) - Achievement of a capacity during the test of not less than 95% of the contracted capacity triggers the Full Commercial Operation Date (FCOD) and hence, the commencement of the Term of the PPA.
- Annual Contracted Capacity Test - to confirm the plant capacity on a regular basis for purposes of invoicing were in line with international practice.
- Availability failures - KPLC would call for capacity tests for failure to deliver NEO in line with the dispatch instruction.
- Reduced availability - the target availability for all thermal power plants was set at 85% of the CCSD.

We noted the following:

- A target availability factor for a Diesel Power Generator or the geothermal power plant of 0.85 seems to be rather on the low side. This shows as well in the analysis of the data provided by KPLC, showing that the availability of the various plants in the selected periods partially exceeds 90% of availability calculated on the CCSD.

- It should be noted that the target availability of 85% had been set out in KPLC tender documents. This was not in line with best international practice, where it is mostly left open to the bidders to determine the target availability by themselves based on their experience with the operation of similar plants. The effect was that the bid prices for capacity charge rates most likely will decline under competitive conditions.
- The payment mechanism does not set strong incentives for the IPP to keep the availability at or above 85%, a level at the IPP would receive the full capacity charge. Considering that these plants have an average availability of 90% as noted in above, a payment deduction factors should commence rights below the 85% mark and be executed every month when availability is below this mark (as long as the unavailability was not scheduled and approved).
- Deduction factors to the capacity payment for availabilities below 80% and 65% only applied if such conditions prevailed for a period of 3 to 6 consecutive months, as the case may be. This was not in line with standard international practice and exposed KPLC to a significant risk of under-performance by the IPP.
- In section 4.1.2.1.4, it was observed that the adjustments for capacity payments and the adjustment factors (i.e., when AMA/MTA was less than 1), were not correctly applied in the invoices31.
- KPLC should have had the right to review and comment on the restoration plan (of availablity to target required) and the selection of a new O&M contractor and also have the right to monitor the implementation of the restoration plan and the related activities.

Deviations from dispatch instructions - thermal IPPs were required to operate the plant in accordance with KPLCs' dispatch instructions and within a dispatch tolerance band of +/- 3%, provided that the NEO in any given settlement period was not less than requested in the dispatch instruction.

We noted the following:

- The principle of dealing with over- and under-generation was not very often used in PPAs, however, it seemed to address an issue that was specific to the Kenyan power system.
- Over-generation seemed to happen on a regular basis, but mostly within the 3% threshold and hence did not trigger any reactions.
- Under-generation hardly occurred, and if it does, it only affects one or two settlement periods, typically while ramping up generation, in accordance with dispatch instructions.
- The analysis of the data provided by KPLC indicated that neither of the two instruments had been applied in practice. E.g., in the case of Rabai Power high levels of over-generation were observed on 10th May 2021, where the NEO exceeded KPLC's dispatch instructions between 14:30 and 23:30 hours in the range of 4.3% to 21.1% (The NEO even exceeded the declared capacity at the time).

Large scale renewable energy plants

Currently there are two large scale wind IPPs connected to the grid, which are LTWP project (FCOD - March 2019) (Annexure 1.3.6.4) and Kipeto project (FCOD - July 2021) (Annexure 1.3.6.14). There are three solar PV Projects (Selenkei, Cedate and Malindi) (Annexures Annexure 1.3.6.12, 1.3.6.15 and 1.3.6.16), each with a 40 MW capacity. Selenkei and Cedate achieved FCOD on 12 August 2021, while

[31] Only selected invoices are available for this review. Further investigations may therefore be necessary.

Malindi achieved FCOD on 22 January 2022 (Annexure 3.5.4.2). All five projects were based on take-or-pay PPAs, as it is typical for intermittent power generation facilities such as wind or solar PV power plants, where power generation depends on the availability of the respective resources.

For the renewable energy plants, the following observations and recommendations were made:

Plant	Observation	Recommendation
LTWP	Capacity Factor Over a period of 7 months for which data was availed by KPLC, the capacity factor of the plant varied from month to month and showed an average of about 57.4%. KPLC data on net electrical output per plant provided a capacity of 45.5% for the period between July 2019 to June 2020 (Annexure 1.3.6.24)and 57.7% for the period between July 2020 to June 2021(Annexure .3.6.25). The reasons for the large differences may be due to the lag of experience (seasonality of wind speeds) with the plant as it only started operation in 2019.	Future developments should be observed closely. It would help to observe wind patterns for a longer period then consider a realistic figure for DET[32]. The current 62% capacity factor had not been achieved and should probably be reduced.

	Forecasting accuracy
	
	Forecasts for select months[33] in 2020 and 2021 hugely overstated the actual NEO in most of the cases (Annexure 3.5.4.3). Only in a limited number of periods forecasts was the actual generation underestimated. For deviations from forecasted values:
	• In case that the forecasted electricity generation in an hour exceeded the actual delivered NEO, KPLC was obliged to take the entire NEO delivered to the delivery point and pay for it.
	• In those cases, where the actual NEO exceeded the forecasted value, KPLC had the choice between:
	  • Taking all the NEO and paying for it
	  • Requesting the IPP to curtail the plant to the forecasted value. In this case, the IPP had the option to deliver all the NEO, with the knowledge that it would not receive payment
		The forecasting system and the resulting incentives should be revised in future to provide clear incentives to the IPP, to keep the forecasts as precise as possible. International practice provides sufficient examples on such approaches, which could as well be implemented in Kenya.

[32] The PPA provided for a Discounted Energy Threshold (DET) of 1,683,672 MWh, which approximated to a capacity factor of 62%. If, in an operating year, the aggregated NEO (including Deemed Generated Energy) exceeded the DET, only 50% of the then applicable energy charge rate used while invoicing. The same capacity factor would be applied in the first year of operation, for calculation of the Deemed Generated Energy (DGE).

[33] July, October, November and December 2020, and April, May and June 2021

	for the NEO exceeding the forecasted electricity generation plus a 9 MW threshold. Based on above, Clause 7.5 of the LTWP PPA does not incentivize the provision of accurate forecasts of electricity generation by the wind plants and led to the overstatement of projected generation. Failure to obtain accurate forecasts has a significant impact on the NCC's dispatch and scheduling process of other plants, to keep the system balanced and electricity supply stable. It triggers the need for additional ancillary services to be implemented in the system, which come at a cost. Such costs are eventually carried by KPLC and/or loaded to customer tariffs.	
	Deemed generated energy calculation and wind plant performance Uncalibrated anemometers on top of the wind turbine generators are used to measure wind speeds. These do not provide data with the level of accuracy that is typically used for metering.	Relevant measurement devices such as anemometers etc. need to be independently established from the plant and calibrated on a regular basis
Kipeto and LTWP	Guaranteed Availability Both wind PPAs contain a guaranteed availability value of 78% for LTWP and 80% for the Kipeto wind project. Like the thermal PPAs, both PPAs contain a mechanism which sees a reduction in payments when the guaranteed availability is not met for a period of three (LTWP) or 6 (KWP) consecutive months. KPLC has the right to terminate the PPA, if the availability falls below 60% for a consecutive period of four months (LTWP) or six months (KWP).	**Consideration** to be made to adopt international standard practices, where penalties apply at a higher level of availability and termination may also be considered at a higher level of availability.

3.5.5. HFO Procurement

Under the terms of reference of this forensic assignment, we were required to:

TOR 3: Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.5 of this report.

The HFO procurement compliance assessment was applicable to the following thermal power plants:

- Iberafrica Power (EA) Limited
- Thika Power Limited
- Rabai Power Limited
- Triumph Power Generating Company Limited
- Gulf Power Limited

The HFO procurement process is documented in the PPAs (Annexures 1.3.6.3, 1.3.6.5 - 1.3.6.7), except for Iberafrica Power (EA) Limited ('Iberafrica'), initial PPA dated 16 August 1996 (Annexure 1.3.6.1). The procedures were however included in the amended and restated PPA dated 24 December 2007 (Annexure 3.5.5.1).

Based on the documents availed for our review by the date of compiling this report, the following observations were made:

Finding
Delayed response by KPLC on the HFO procurement evaluation results Clause 9.13.6 of the Rabai PPA (Annexure 1.3.6.3) required KPLC to respond to HFO tender evaluation report in 7 business day. Rabai Power Limited in a letter dated 12 May 2020 (Annexure 3.5.5.2) and signed by the General Manager (GM) Thomas Hedebroe, shared the tender evaluation report with KPLC for which KPLC responded on 05 June 2020 (Annexure 3.5.5.3). In Rabai's response to KPLC's comments in a letter dated 10 June 2020 (Annexure 3.5.5.4) Rabai indicated that they had informed KPLC on proceeding with the FSA in a letter ref KPLC/COM/2020/06/06, having not received any objection on the evaluation report.
The notice issued to KPLC for the HFO tender opening was not within the stipulated 7 days For the following tendering processes, the tender opening notice sent to KPLC was not within the stipulated time in the PPA (7 days' notice): • For the tendering process that led to the FSA between Iberafrica Power Company Limited and Gulf Energy Limited dated 13 October 2015 (Annexure 3.5.5.5), the notice for the tender opening was issued to KPLC three days before the tender opening date. Iberafrica vide a letter dated 16 June 2015 (Annexure 3.5.5.6) signed by Henry K Muthanji, GM and Chief Executive Officer (CEO) informed KPLC that the tender opening date would be 19 June 2015. • For the tendering processes that led to the FSA between Rabai Power Limited and Dalbit Petroleum Limited dated 10 July 2020 (Annexure 3.5.5.7), the notice for the tender opening was issued to KPLC four days before the tender opening date. Rabai Power vide a letter dated 20 April 2020 (Annexure 3.5.5.8) and signed by the GM, Thomas Hedebroe informed KPLC that the tender opening date would be 24 April 2020. Execution of the FSA prior to KPLC approval Gulf Power Limited entered an FSA with Vivo Energy Kenya limited dated 18 February 2021 (Annexure 3.5.5.9) prior to notifying KPLC, which was done on 19 February 2021. KPLC in its response letter dated 17 March 2021(Annexure 3.5.5.10) Gulf Power did not submit the proposed FSA to KPLC for comments prior to signing which was contrary to the fuel procurement procedures in the PPA. KPLC proceeded to make comments to the FSA and requested Gulf Power to engage the supplier and amend the FSA accordingly.
Recommendation
• There is an overall need for KPLC to ensure to adherence to HFO procurement process as stipulated in the PPA. • Delayed notifications and responses from both parties could result in delay of the HFO procurement process and the signing of the FSA. The FSA is a paramount document for the fuel supply process and therefore delay in signing the FSA could result to delay in supplying the fuel required for power generation. • Execution of the FSA without KPLC's consent of the terms therein could result into disputes during the payment of the fuel charges by KPLC if the specifications of the fuel supplied was not agreed upon by the IPP and KPLC.

3.5.6. Tariffs Review Overview

Under the terms of reference of this forensic assignment, we were required to:

TOR 05: Assess the tariffs applied and their conformity with tender documents and relevant laws and policies.

The procedures undertaken to fulfil the above terms of reference are as summarised above in Section 2.2.5 of this Report.

3.5.6.1. Renewable energy IPPs

The Feed-in-Tariff (FiT) was an instrument developed to promote generation of electricity from renewable sources. We assessed compliance of the tariffs as stipulated on the PPAs were aligned to the FiT values indicated on the FiT policy (Annexure 3.5.6.1). The table below highlights the applicable tariffs for the various IPPs producing renewable energy, based on their installed capacity (Annexures 1.3.6.8 - 1.3.6.13, 1.3.6.15 - 1.3.6.20).

Table 44: Summary of applicable tariffs for the various IPPs producing renewable energy

IPPs	Type of plant	Plant Capacity	Energy component	Tariff on FiT policy	Fixed and escalable computation	Tariff on PPA
Regen-Terem SHPP	Small hydro	5 MW	Fixed	0.0825 to 0.105	An interpolated rate was used	0.08679 US $/kWh
			Escalable			0.00755 US $/kWh
Imenti Tea Factory (KTDA)	Small hydro	900 KW	Fixed	0.0825 to 0.105	An interpolated rate was used	0.06 US $/kWh
Power Technology	Small hydro	514 KW	Fixed	0.0825 to 0.105	An interpolated rate was used	0.10 US $/kWh
Biojoule Kenya	Biomass	2.2 MW	Fixed	0.10	0.085	0.085 US $/kWh
			Escalable		0.015	0.015 US $/kWh
Chania Power - KTDA	Small hydro	1.0 MW	Fixed	0.0825 to 0.105	An interpolated rate was used	0.0955 US $/ kWh
			Escalable			0.0083 US $/kWh
Gura KTDA	Small hydro	5000 KW	Fixed	0.0825	0.0759	0.08 US $/kWh
Strathmore Solar	Solar	0.6 MW	Fixed	0.12	0.1104	0.1104 US $/kWh
			Escalable		0.0096	0.0096 US $/kWh
KTDA Metumi	Small hydro	5.6 MW	Fixed	0.0825	0.0759	0.0855 US $/kWh
			Escalable		0.0066	0.0074 US $/kWh
Kianthumbi SHHP	Small hydro	513 kW	Fixed	0.105	0.0966	0.0966 US $/ kWh
			Escalable		0.0084	0.0084 US $/kWh
Selenkei Investment Limited	Solar	40 MW	Fixed	0.12	0.1056	0.1056 US $/kWh
			Escalable		0.0144	O.0144 US $/kWh
Cedate Limited	Solar	40 MW	Fixed	0.12	0.1056	0.1056 US $/kWh
			Escalable		0.0144	O.0144 US $/kWh
Malindi Solar Group	Solar	40 MW	Fixed	0.12	0.1056	0.1056 US $/kWh
			Escalable		0.0144	0.0144 US $/kWh

Apart from the tariff on Imenti Tea Factory's PPA (Annexure 1.3.6.17), all other tariffs were observed to be following the FiT policy. For Imenti, it was noted that the applied tariff was below the least tariff of 0.0825 US $/kWh.

3.5.6.2. Other IPPs

LTWP and Kipeto have installed capacities of 310 MW and 100 MW respectively. This is beyond the 50 MW capacity limit set for wind power plants on FiT policy. The tariffs for the two plants are therefore not limited to the FiT values but rather, were negotiated during the contracting process. Tariffs for the thermal and geothermal[34] plants were also negotiated during the procurement process. A review of the negotiated tariffs against those on the executed PPAs has been included in Section 2 of Report 3: IPP Selection Criteria, Events Chronology.

We additionally compared the PPA tariffs against those used in the computation of the applicable charges, on the invoices. The table below summarises the capacity and energy tariffs for geothermal, thermal and wind plants. From our review, tariff differences on the PPAs vis-à-vis those on respective invoices were noted. Specifically, the tariff values on the Rabai PPA dated 04 September 2008 (Annexure 3.1.7.16) were different from those on the invoice (Annexure 1.3.6.33). It should be noted that amendments were made to the referenced PPA via a first amendment agreement dated 30 October 2015. This agreement was not availed for our review and therefore, we could not confirm if the PPA values were also amended/updated to the invoice values.

Table 45: Summary of capacity and energy tariffs for geothermal, thermal and wind plants

IPPs	Type of charge	Tariff on PPA	Invoice tariff
Iberafrica Power Company	Capacity - Fixed component	19 US $/kWh/Month[35]	19 US $/kWh/Month
	Capacity - Escalable component	4.75 US $/kWh/Month[39]	4.75 US $/kWh/Month
	Base energy charge rate	0.0092 US $/kWh[39]	0.0092 US $/kWh
Rabai Power	Capacity - Fixed component	14.4833 Euro/kWh/Month[36]	14.4641 Euro/kWh/Month
	Capacity - Escalable component	2.9167 Euro/kWh/Month[40]	4.0377 Euro/kWh/Month
	Base energy charge rate	0.0063 Euro/kWh[40]	0.0063 Euro/kWh

[34] Geothermal plants whose installed capacities were beyond the 70 MW limit set on the FiT policy
[35] As per PPA dated 24 December 2007 (**Annexure 3.5.5.1**)
[36] As of the PPA dated 04 September 2008 (**Annexure 3.1.7.16**)

IPPs	Type of charge	Tariff on PPA	Invoice tariff
Orpower 4 Inc.	Base capacity charge rate – Plant 1	46.8030 US $/kWh/Month[37]	46.8030 US $/kWh/Month
	Base capacity charge rate – Plant 2	43.7875 US $/kWh/Month[38]	43.7875 US $/kWh/Month
	Base capacity charge rate – Plant 3	43.7875 US $/kWh/Month[42]	43.7875 US $/kWh/Month
	Base capacity charge rate – Plant 4	43.7875 US $/kWh/Month[42]	43.7875 US $/kWh/Month
	Energy charge rate – P1	0.01924 US $/kWh[42]	0.01924 US $/kWh
	Energy charge rate – P2	0.021434 US $/kWh[42]	0.021434 US $/kWh
	Energy charge rate – P3	0.021434 US $/kWh[42]	0.021434 US $/kWh
	Energy charge rate – P4	0.021434 US $/kWh[42]	0.021434 US $/kWh
	Royalty charge rate	0.004 US $/kWh[42]	0.004 US $/kWh
Thika Power (Melec)	Capacity - Fixed component	13.0933 Euro/kWh[39]	16.61488 US $/kWh
	Capacity - Escalable component	3 Euro/kWh[43]	
	Base energy charge rate	0.0074 Euro/kWh[43]	0.0074 Euro/kWh
Gulf Power Ltd	Capacity - Fixed component	PPA version with applicable schedules containing the tariffs was not availed for review	13.6967 Euro/kWh/Month
	Capacity - Escalable component		2.9167 Euro/kWh/Month
	Energy - Fixed		0.0063 Euro/kWh
Triumph Power Ltd	Capacity - Fixed component	19.81667 US $/kWh/Month[40]	19.8167 US $/kWh/Month
	Capacity - Escalable component	4.375 US $/kWh/Month[44]	4.375 US $/kWh/Month
	Base energy charge rate	0.00899 US $/kWh[44]	0.00899 US $/kWh
	Energy -Fixed	0.06464 Euro/kWh[41]	0.06464 Euro/kWh

[37] As per PPA dated 20 December 2016 (**Annexure3.5.3.2**)
[38] As per PPA dated 26 November 2014 (**Annexure 3.5.3.1**)
[39] As per PPA dated 02 July 2012 (**Annexure 1.3.6.7**)
[40] As per PPA dated 14 June 2012 (**Annexure 1.3.6.5**)
[41] As per PPA dated 13 May 2013 (**Annexure 3.5.3.4**)

IPPs	Type of charge	Tariff on PPA	Invoice tariff
Lake Turkana Wind Power	Energy - Escalable	0.01056 Euro/kWh[45]	0.01056 Euro/kWh
Kipeto Energy Plc	Energy -Fixed	0.12 US $ /kWh[42]	0.12 US $ /kWh

[42] As per PPA dated 17 June 2016 (**Annexure 1.3.6.14**)

3.5.7. Timelines Review

Under the terms of reference, we were required to:

TOR 11: Establish whether extensions of various project timelines were in accordance with the applicable laws and regulations

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.5 of this report.

Changes to project timelines were effected through variations or amendments to the existing PPAs. Section 2.2 and 2.5 of the Laws and Regulation report (report 2) indicates the regulatory framework applicable for contract variations or amendments. Our review entailed comparison of the project timelines between the initial and current PPA and where changes were noted, verifying whether the required approvals were obtained.

The compliance to the applicable laws and regulations for all IPPs is documented under section 3 of the Laws and Regulation report (report 2).

Below is a summary of the observations made from the documents available:

Table 46: Summary of observations made from Timelines Review

IPP	PPA timeline varied (Yes/No)	Variation	Variation approved
Iberafrica	Yes	Changes in the current PPA relating to additional project timelines for the capacity enhancement of the existing plant by 50MW (Annexure 3.5.5.1)	Yes (Annexure 3.1.12.38 and 3.1.12.27)
		Effective date was amended further to 01 March 2010 as indicated in the first supplement to the amended and restated PPA dated 11 November 2010. (Annexure 3.5.7.1)	Yes (Annexure 3.5.7.2 and 3.5.7.3)
Orpower 4 Inc	Yes	Changes in the current PPA related to additional timelines to incorporate the additional plants and changes in the definition of the effective date. (Annexure 3.5.3.2)	Yes (Annexure 3.1.12.5 and 3.5.7.4)
Rabai Power Limited	- The initial PPA between Rabai Power Limited and KPLC dated 01 February 2007 was not availed for our review, therefore we could not determine the initial project timelines as indicated in the agreement. - The current PPA is an amendment deed dated 03 October 2016 (Annexure 3.5.7.5) which did not indicate any change to the project timelines compared to the prior amendment (second amended and restated PPA) dated 04 September 2008 (Annexure 3.1.7.16).		

IPP	PPA timeline varied (Yes/No)	Variation	Variation approved
Lake Turkana Wind Power Limited	Yes	Changes in the current PPA related to additional timelines and changes in the definition of the following: • First COD • Long Stop Construction Start Date • Long stop Effective Date • Target Effective Date • Unit Group COD (Annexure 3.5.3.4)	Yes (Annexure 3.1.12.32 and 3.1.12.33)
		Additional project timeline changes in the first and second variation agreements dated 31 July 2014 and 19 September 2017 respectively: • Long Stop Effective Date – 30 November 2014 or such other date as may be agreed by the parties. • GOK TI (Transmission Interconnector) Delay DGE Payments Commencement Date - 15 May 2017 • DGE Recovery Period - Period from 01 June 2018 and expiring on 31 May 2024 (Annexure 3.5.7.6 and 3.5.7.7)	Yes (Annexure 3.1.12.11, 3.1.12.20 and 3.5.7.8)
Triumph Power Generating Company Limited	Yes	Change of the initial PPA target effective date to 31 March 2013 (Annexure 3.5.7.9)	Yes (Annexure 3.5.7.10 and 3.5.7.11)
Gulf Power Limited	Could not establish whether there were any project timeline changes for Gulf Power because the variation agreement to the initial PPA was not availed for our review.		
Thika Power Limited	Our review did not indicate any variations or amendments to the Thika Power initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Strathmore University	Yes	The target effective date was amended to 31 October 2017	[43]Partially (Annexure 3.1.12.12 and 3.5.7.12)

[43] What was not availed was the approval of the amended and restated PPA by the PPP Committee, however ERC and Board Approvals were availed.

IPP	PPA timeline varied (Yes/No)	Variation	Variation approved
Power Technology Solutions Limited	Our review did not indicate any variations or amendments to the PTSL initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Regen-Terem SHPP Limited	We did not verify whether the amended PPA included any changes in project timelines as it was not availed for our review.		
Biojoule Limited	Our review did not indicate any variations or amendments to Biojoule initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Cedate Limited	No[44]		
Hydro Project Services Limited	Our review did not indicate any variations or amendments to the Hydro PSP initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Kipeto Energy PLC	Our review did not indicate any variations or amendments to the Kipeto initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Malindi Solar Group Limited	No[45]		
Selenkei Investments Limited	No[46]		
Imenti Tea Factory Company Limited	Our review did not indicate any variations or amendments to Imenti initial PPA, therefore we did not establish whether there were changes in the initial project timelines.		
Chania Power Company Limited	Yes	- Change of the target effective date to 30 November 2016 - We could not establish whether the revalidated PPA had additional changes to project timelines as it was not availed for our review	[47]Partially (Annexure 3.5.7.13 and 3.1.12.17)
Metumi Power Company Limited	Yes	- Change of the target effective date to 30 November 2016. - We could not establish whether the revalidated PPA had additional changes to project timelines as it was not availed for our review.	Yes (Annexure 3.5.7.19)

[44] There was a Deed of Variation (**Annexure 3.5.7.15**) but it did not entail a change in timelines.
[45] There was a Deed of Variation (**Annexure 3.5.7.14**) but it did not entail a change in timelines.
[46] There was a Deed of Variation (**Annexure 3.5.7.16**) but it did not entail a change in timelines.
[47] The approval of the revalidated PPA by the PPP Committee was not availed, however, the Board and ERC approvals were availed.

IPP	PPA timeline varied (Yes/No)	Variation	Variation approved
Gura Power Limited	Yes	The target effective date was amended in the current PPA to 28 February 2017. (Annexure 3.5.7.17)	Yes (Annexure 3.1.12.17 and 3.5.7.18)

Project construction risk

Out of the 15 IPPs that required construction of power plants, four had project timeline extensions that were attributed to capacity enhancements, additional plants, and changes in definitions of the project timelines. The four include Iberafrica, Orpower, LTWP and Triumph. Out of the four IPPs only LTWP's project timeline extension was related to a delay in the construction of the Transmission Interconnector.

A key area of construction risk is infrastructure that must have been provided by KPLC or a related party (e.g., Kenya Electricity Transmission Company Limited (KETRACO)). In the case of the LTWP, the GOK took over the liability to construct the necessary transmission infrastructure from LTWP (see Circular to Directors 30/11) (Annexure 3.1.6.9) with the stated benefit being price ("using concessionary funding procured by GOK from development partners"). The same Circular highlights risks involved (risk of failure to complete the line on time, Transmission Interconnector (TI) outages or interruptions during operational phase, force majeure that affects KETRACO or the Engineering, Procurement and Construction (EPC) contractor resulting in delays in TI and a TI interruption). However, the significance of this risk appears not to have been captured. Moreover, part of the World Bank´s subsequent decision to pull out of supporting the project was due to its belief that the transmission construction timeframe was not achievable.

As indicated in Section 2.4 of Report 3 – Procurement of IPPs – Selection Criteria, Events Chronology, the Deemed Generated Energy (DGE) if the TI was not ready by the time required by LTWP to commission the first 50MW was Euro 1.7 million for the first month, increasing monthly by Euro 850,000 rising to Euro 10.2 million per month once the entire 300MW wind farm was completed. The DGE payments would be paid by GOK to LTWP if LTWP was ready to commission at least 50MW but could not do so due to the TI not having been ready 26 months from the effective date of the PPA or 31 December 2011, whichever was to occur last. The risk later materialised (see Circulars to Directors 76/17) (Annexure 3.2.5)

As of 03 August 2017, TI being constructed by KETRACO was behind schedule (the expected completion date was 26 January 2017) and LTWP had commenced commissioning. After several negotiation meetings, it was agreed that GOK would make payment of Euro 46 million to LTWP on or before 31 August 2017. The payment would be treated as part payment of the DGE payments that would accrue during the TI Delay period and would eventually be recovered from electricity consumers as a pass-through cost. The balance of the DGE payable up to 31st May 2018 (equivalent to Euro 81,577,128.32) would be recovered through a tariff adjustment. We did not confirm how much had been paid to date for failure to complete the TI on time.

3.6. Financial Review of the IPPs

3.6.1. Financial Model Development

Under the terms of reference, we were required to:

TOR 4: Evaluate the accuracy of the financial models supplied.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.6 of this report.

Review of the PPAs in scope (Annexure 1.3.6.1 - 1.3.6.20) indicated that only Kipeto was required to provide KPLC with the audited financial model immediately upon its approval by the financing parties per its duly executed PPA. Our review, therefore, only focused on the Kipeto financial model (Annexure 3.6.1.1). The model incorporated all costs, including development, construction, and commissioning costs, financing costs and fees, interest during construction, insurance costs, development fees, construction management costs, start-up costs, and contingencies. The PPA also references that any termination costs will be determined by reference to the financial model.

The Kipeto financial model used during the transaction was reviewed against best modelling practice. The following improvement areas were made. Refer to Section 2 of Report 7: Financial Review of IPPs for the observations for all the parameters the model was evaluated against.

Table 47: Summary of review of Kipeto Financial Model

Parameter	Kipeto Financial Model
Alignment with the transaction	
Contracted capacity	No reference to the contracted capacity - model built up from turbines and energy produced.
Generation output	PPA provisions for curtailment in the first 3 years are captured. However, output calculations are not explained.
Evaluation of the modelling against best practices in model development	
Is there a table of contents?	There was no table of contents for the model.
Is there are a description of how to use the model?	There was no description of how to use the model, and no accompanying user manual was provided.
Are the sources of key inputs specified?	No – the model had limited sourcing of key input values and referencing.
Is the financial model capable of performing calculations? *Financial models should have different levels of scope to perform calculations and, for example, run scenarios. Having this functionality can assist in a model update where for example there is major parameter change and/or compensation is payable.*	The model did not have explicit functionality for calculations (e.g., Internal Rate of Return (IRR), Return on Earnings (ROE) incorporated.
Has the financial model been audited and is an audit certificate available?	The PPA states that the model should be audited but no certificate/confirmation was availed.
Subsequent application of the model	

Parameter	Kipeto Financial Model
Has there been amendments or compensation paid?	No – Based on the information availed, there has been no amendments or compensation to date.
Is there other evidence that suggests models have been used and updated appropriately? *For an update to be useful, it is first important to have the original version well centred on financial close, which occurs for Kipeto Energy.*	N/A - There is no additional evidence that the model has been otherwise amended.

Below is an overall finding with respect to financial models:

Finding
Financial models are "living documents" that can be updated and form an anchor to the transaction and the basis by which modifications are made. This observation reinforces the need for the models to perform a critical and central role in any future transaction and in an existing PPA. Except for Kipeto Energy Limited, there was no requirement in the other 19 PPAs in scope for review in this assignment, to provide KPLC with an audited financial model. The role of KPLC in reviewing and auditing the Kipeto model appears passive. The lack of a requirement to provide a financial model in all PPAs except Kipeto's, suggests that the problem is principally with the PPA design.
Recommendations
a) A requirement should be included in all new PPAs for an audited financial model to be developed. The PPA should specify the purpose of the financial model, which can include: • Basis for determination of tariff adjustments resulting from changes in costs (e.g., due to Change in Law), • Basis for determination of tariff adjustments resulting from refinancing cases with benefit sharing, and • Determination of the purchase price (or buy out price) in case of termination. b) Having an audited financial model as a requirement for the PPA transaction process has the following benefits: • Assessment of the correctness of tariffs proposed. • Enhancing transparency and confidence in the transaction. • Basis for any tariff finalization (e.g., due to interest rate hedging) at financial closing. • Require improved modelling capacity within KPLC. Further, IPPs should be advised to enhance the user-friendliness of financial models by requiring best practice principles in their development. c) Key requirements for the model should be set out in the tender documents (in the case of an auction) and in guidelines produced by KPLC or the MoE to support an application under the FiT process. In the case of an auction, the tender documents should set out a detailed specification of what should be included in the financial model, including, for example:

- Key worksheets (e.g., costs, financial data, levelized costs etc.) and their content.
- Time specificity (e.g., monthly during construction, quarterly from the commercial operation).
- Incorporation of indexing.
- Requirement for a worksheet or separate document outlining key assumptions and reference key variables.
- Requirement for the bidder to provide detailed operating instructions.
- Auditing requirements.

3.6.2. Financial Statement Review

Under the terms of reference, we were required to:

TOR 9: Carry out an analysis of IPPs' audited accounts for at least the last 5 years to ascertain whether the key parameters are in line with the audited financial models provided for in the PPAs.

TOR 10: By reviewing independently verified/verifiable information sources, ascertain whether at financial close, in the first year of commercial operations, and over the last 5 years, that the key financial and operational parameters are in line with the approved financial models submitted to Energy and Petroleum Regulatory Authority (EPRA) / Ministry of Energy (MOE) / KPLC and as provided for in the signed PPAs.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.6 of this report.

Our overall observation with regards to financial statement review is as follows:

Finding
As indicated in Section 3 of Report 7: IPP Financial Review, our review of the 20 IPPs in scope confirmed that none had a requirement in the duly executed PPAs (Annexure 1.3.6.1 - 1.3.6.20) for the IPPs to provide audited financial statements to KPLC on an annual basis or as required. In addition, none of the IPPs is a listed entity either in Kenya or overseas making their audited financial statements not a matter of public access. We, therefore, did not undertake a review of any IPP's audited financial statements over a five-year period. Further, we did not review whether at financial close, in the first year of commercial operations, and over the last 5 years, that the key financial and operational parameters were in line with the approved financial models submitted to EPRA, MoE or KPLC as provided for in the signed PPAs.
Recommendation
A requirement should be included in all new PPAs for IPPs' audited financial statements to be shared with KPLC annually. The financial statements would be relied on for review of the financial and operational parameters alignment with the financial models.

3.6.3. Value For Money (VFM) Review

Under the terms of reference, we were required to:

TOR 14: Establish whether KPLC obtained value for money in the PPAs.

The procedures undertaken to fulfil the above terms of reference are as summarised in Section 2.2.6 of this report.

In a letter dated 18 September 2015 (Annexure 3.6.3.1), The Secretary to the PPP Committee at National Treasury, Engineer Stanley K. Kamau issued guidance to MoE, and subsequently to KPLC on the approval process of projects under the Fit Policy. Once the FiT policy committee had approved the technical and other aspects of FiT project feasibility and grid connection studies, the same studies were to be submitted to the PPP Committee for approval of the fiscal risks and contingent liabilities and for confirmation of the VFM, affordability and risk transfer tests.

Accordingly, for projects developed under the FiT regime, the issue of VFM goes beyond KPLC as VFM was to be assessed by the PPP committee. Furthermore, MoE was the entity that determined and set prices under the FiT regime. KPLC only negotiated with the IPP for the eventual PPA in which these set prices were applied.

Information on VFM or financial risk assessment done was not received. In some cases, letters written by the National Treasury approving the PPAs for some FiT projects refer to a "Project Finance and Risk Assessment Report" submitted by KPLC. These documents have been requested but were not received at the time of preparing this report.

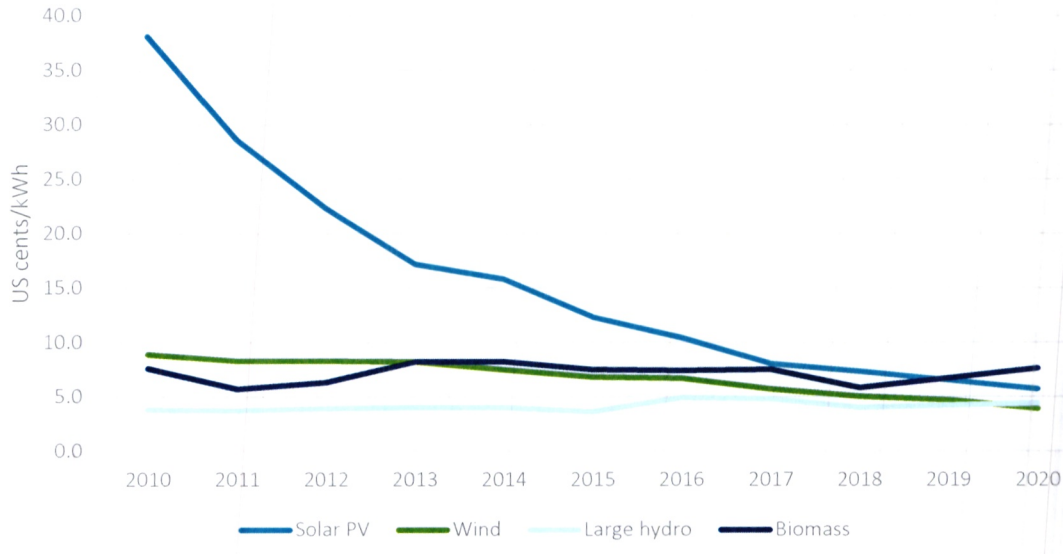
As was indicated in our inception report to KPLC dated 11 May 2022, we would enquire whether VFM assessments and financial risk assessments were conducted for each of the PPAs, and, where applicable, obtain and comment on the outcome of the assessments and whether KPLC or any other party confirmed that the value from the PPAs was still in existence at financial close. Our review would not entail a VFM of the PPAs.

We sought confirmation and relevant documents that value for money assessments were undertaken and value for money confirmed at financial close for the scoped IPPs but did not receive the requested information as of the time of compiling this report. The request was through a letter to submitted to the OAG for adoption and transmittal to the Director General, Public Private Partnerships Directorate, at the National Treasury.

3.6.3.1. Comparison of Kenyan FiT prices and average global costs

Finding
While the comparison between Kenyan FiT prices and average global costs is inevitably highly subjective, the global trends as indicated below appear to indicate that at a minimum a major review of the FiT tariffs for solar PV and wind was appropriate from around 2016 - up to 5 years before a major restructure was undertaken and the FiT removed in favour of auctions for solar PV and wind

Figure 1: [48]Global weighted average utility-scale levelized cost of energy 2010-2020 (2020 US cents/kWh)



Recommendation
The adoption of well-designed auction processes for solar PV and wind should enable the gaps between support prices and international prices to reduce. For other technologies the applicability of the existing FiTs and the maximum size of facility under the FiT (currently 20MW) should be regularly reviewed.

[48] Source: IRENA, Power Generation Costs 2020



Appendices and Annexures

Appendices

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#	Appendix details
1	Specific terms of reference and where covered
2	List of relevant stakeholders.
3	List of documents not provided by the date the report was compiled.
4	List of persons interviewed
5	List of common addresses per BO search

Appendix 1: Specific terms of reference and where they are covered.

#	Specific Task	Where covered
TOR01	Understand the procurement options, processes and contracting procedures followed by Kenya Power to determine whether the PPAs were procured in accordance with the applicable Laws and or regulations in force at the time of each procurement and review the various methods used in the IPP procurement processes	Report 2 Report 2, 3 and 4
TOR02	Establish the selection criteria used to identify the eventual IPP in each instance	Report 3
TOR03	Assess the PPA's compliance with: (i) Bid and Tender requirements including bonds and guarantees requested, if any. (ii) Contracted capacity, (iii) Invoices (iv) Plant Operating Procedures, (v) HFO procurement (where applicable), (vi) Steam procurement (where applicable).	Report 2 & 6
TOR04	Evaluate the accuracy of the financial models supplied.	Report 7
TOR05	Assess the tariffs applied and their conformity with tender documents and relevant laws and policies.	Report 6
TOR06	Establish whether the roles played by various actors in the energy sector were in line with their respective mandates and applicable procurement laws.	Report 2
TOR07	Identify the contractors and subcontractors that supported developers and sponsors for each PPA.	Report 5
TOR08	Establish the beneficial owners of the respective power plants and establish any linkages which may result in a conflict of interest.	Report 5
TOR09	Carry out an analysis of IPPs' audited accounts for at least the last 5 years to ascertain whether the key parameters are in line with the audited financial models provided for in the PPAs.	Report 7
TOR10	By reviewing independently verified/verifiable information sources, ascertain whether at financial close, in the first year of commercial operations, and over the last 5 years, that the key financial and operational parameters are in line with the approved financial models submitted to Energy and Petroleum Regulatory Authority (EPRA) / Ministry of Energy (MOE) / KPLC and as provided for in the signed PPAs.	Report 7
TOR11	Establish whether extensions of various project timelines were in accordance with the applicable laws and regulations.	Report 6
TOR12	Ascertain the capacity discharged by various plants in comparison with the expectation of the respective PPAs for at least the last 5 years.	Report 6
TOR13	Perform a comparative analysis of procurement costs of energy from the IPP plants and against KenGen together with the resulting generation tariff.	Report 6
TOR14	Establish whether KPLC obtained value for money in the PPAs.	Report 7

#	Specific Task	Where covered
TOR15	Assess whether there is malpractice in the procurement of IPPs and: (i) Determine whether there was any fraud; (ii) Assess the extent of fraud; (ii) Establish the modus operandi of the fraud scheme; (iv) Quantum of the loss/damage to KPLC because of the fraudulent and corrupt acts; (v Identify the culpable/responsible persons and parties.	Report 3 and 3A, Summary of Procurement Findings
TOR16	Assess the effectiveness and application of the respective control and oversight by KPLC and identify weaknesses that impede good performance, for example, adequacy of resources, lack of equipment, and competence and identify potential areas of improvement on the oversight role.	Report 2
TOR17	Make recommendations to improve risk allocation to KPLC/Government of Kenya (GoK) and reduce fraud (if any) and various other actions geared towards improving the procurement of IPPs.	All

Appendix 2: List of relevant stakeholders

Appendix 2.1: KPLC Board Chairs, Board Members, Managing Directors/ Chief Executive Officers, and Company Secretaries from 1996 to 2022

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
1995/1996	Iberafrica	Prof J.M Nyasani	- C.N Mutitu, E.B.S (Principal Secretary, Ministry of Energy) - S.W. Ndindiri (Alternate to C.N. Mutitu) - S.S Lesrima, C.B.S (Principal Secretary, The National Treasury) - J.K Kinyua (Alternate to S.S Lesrima) - P.K Chemng'orem - S.O.J Ambundo - J.R Mwasambo - M. Rotich Maina - J.M. Mutisya - P.G Mureithi	S.K Gichuru E.B.S. M.B.S.	J.N. Kimani
1996/1997	None	Titus T. Naikuni	- C.N Mutitu, E.B.S. (Principal Secretary, Ministry of Energy) - S.W. Ndindiri (Alternate to C.N. Mutitu) - S.S. Lesrima C.B.S. (Principal Secretary, The National Treasury) - N.W. Kimani (Alternate to S.S Lesrima) - S.O.J. Ambundo - J.M. Mutisya - Tom D. Owuor, O.G.W. - Z.N. Kahura - D.O. Kombo	S.K Gichuru, E.B.S., M.B.S.	J.N. Kimani
1997/1998	OrPower	Titus T. Naikuni	- C.N. Mutitu, EBS (Principal Secretary, Ministry of Energy) - S.W. Ndindiri (Alternate to C.N. Mutitu) - M.K. Chemengich (Principal Secretary, National Treasury) - N.W. Kimani (Alternate to M.K Chemengich) - S.O.J. Ambundo - J.M. Mutisya - Tom D. Owuor, OGW - Z.N. Kahura - F.M. Nyaga	S.K. Gichuru, EBS, MBS	J.N. Kimani

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
1998/1999	None	Titus T. Naikuni	- M. Oduor Otieno (Principal Secretary, National Treasury) - N.W. Kimani (Alternate to M. Oduor Otieno) - M. Ngali (Principal Secretary, Ministry of Energy) - F.G. Meta (Alternate to M. Ngali) - S.O.J. Ambundo - Tom D. Owuor, MBS, OGW - Z.N. Kahura - F.M. Nyaga	S.K. Gichuru, EBS, MBS	J.N. Kimani
1999/2000	None	Titus T. Naikuni	- M. Oduor Otieno (Principal Secretary, National Treasury) - K. Mbathi (Alternate to M. Oduor Otieno) - M. Ngali (Principal Secretary, Ministry of Energy) - A.A. Ali (Alternate to M. Ngali) - S.O.J. Ambundo - T.D. Owuor, MBS, OGW - Z.N. Kahura - F.M. Nyaga - K. Mbathi (Alternate to M. Oduor Otieno) - A.A. Ali (Alternate to M. Ngali)	S.K. Gichuru, EBS, MBS	J.N. Kimani
2000/2001	None	D.D. Afande, CBS	- Prof. W.M. Mwangi (Principal Secretary, Ministry of Energy) - M.C. Kigen (Alternate to Prof. W.M. Mwangi) - Mwaghazi Mwachofi (Principal Secretary, National Treasury) - P. Gakunu (Alternate to M. Mwachofi) - S.O.J. Ambundo - Tom D. Owuor, MBS, OGW - F.M. Nyaga	S.K. Gichuru, EBS, MBS	Laurencia K. Njagi
2001/2002	None	D.D. Afande, CBS	- Joseph Kinyua (Principal Secretary, National Treasury) - P. Gakunu (Alternate to J.K. Kinyua) - Prof. W.M. Mwangi (Principal Secretary, Ministry of Energy) - B.M. Nzioki (Alternate to Prof. W.M. Mwangi) - S.O.J. Ambundo - Tom D. Owuor, MBS, OGW	S.K. Gichuru, EBS, MBS	Laurencia K. Njagi

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- F.M. Nyaga		
2002/2003	None	Eng. Alfred W. Sambu	- Joseph M. Magari (Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph M. Magari) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Ng'ang'a Munyu (Alternate to Patrick M. Nyoike) - Edwin Wasunna - Dr. Susan M. Musyoka - Tom D. Owuor, MBS, OGW - Fidesius M. Nyaga - Swaleh S. Imu - Eng. Ngugi Kiuna	Eng. Jasper O. Oduor	Laurencia K. Njagi
2003/2004	None	Eng. Alfred W. Sambu	- Joseph Kinyua (Appointed on 8 October 2004 - Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Ng'ang'a Munyu (Alternate to Patrick M. Nyoike) - Edwin Wasunna - Dr. Susan M. Musyoka - Aram M. Mbui (Appointed on 12 October 2004) - Fidesius M. Nyaga - Eng. Swaleh S. Imu - Ngugi Kiuna - Joseph M. Magari (Resigned on 4 July 2004) - Tom D. Owuor (Resigned on 8 October 2004)	Eng. Jasper O. Oduor	Laurencia K. Njagi
2004/2005	None	Eng. Alfred W. Sambu	- Joseph Kinyua (Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Ng'ang'a Munyu (Alternate to Patrick M. Nyoike) - Edwin Wasunna - Dr. Susan M. Musyoka - Fidesius M. Nyaga	Eng. Jasper O. Oduor	Laurencia K. Njagi

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Eng. Swaleh S. Imu - Ngugi Kiuna - Aram M. Mbui		
2005/2006	None	Eng. Alfred W. Sambu	- Joseph Kinyua (Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Ng'ang'a Munyu (Alternate to Patrick Nyoike) - Edwin Wasunna - Dr. Susan M. Musyoka - Fidesius M. Nyaga - Eng. Swaleh S. Imu - Ngugi Kiuna - Aram M. Mbui	- Eng. Jasper Oduor (Left in June 2006) - Zachary O. Ayieko (Appointed in June 2006)	Laurencia K. Njagi
2006/2007	Rabai Power	- Eng. Alfred W. Sambu (Left on 16/11/2006) - Dr. Crowther N. Pepela (W.e.f. 16/11/2006)	- Joseph Kinyua (Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph Kinyua) - Solomon Kitungu (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Ng'ang'a Munyu (Alternate to Patrick M. Nyoike) - Ng'ang'a Munyu (Alternate to Patrick M. Nyoike – Left on 15/02/2008) - Fidesius M. Nyaga - Aram M. Mbui - Eliezar O. Ochola (Elected on 8/12/2006) - Esau K. Kioni (Elected on 8/12/2006) - Samuel M. Mwangi (Appointed on 22/02/2007) - Dr. Theodorah Malla-Kilukumi (Appointed on 15/10/2007). - Dr. Susan M. Musyoka (Left on 8/09/2007) - Eng. Swaleh S. Imu (Left on 22/02/2007) - Edwin Wasunna (Left on 8/12/2006) - Ngugi Kiuna (Left on 8/12/2006)	- Zachary 0. Ayieko – (Left on 01/09/2007) - Eng. Joseph K. Njoroge (Appointed on 01/09/2007)	Laurencia K. Njagi

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
2007/2008	None	Dr. Crowther N. Pepela	- Joseph Kinyua (Principal Secretary, National Treasury) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Benn Khadiagala (Alternate to Patrick M. Nyoike – Appointed on 15/02/2008) - Aram M. Mbui - Fidesius M. Nyaga - Esau K. Kioni - Eliazar O. Ochola - Samuel M. Mwangi - Dr. Theodorah Malla-Kilukumi	Eng. Joseph K. Njoroge	Laurencia K. Njagi
2008/2009	None	Dr. Crowther N. Pepela	- Joseph Kinyua (Principal Secretary, National Treasury) - Solomon Kitungu (Alternate to Joseph Kinyua – Left on 16/06/2009) - Joseph Kariuki (Alternate to Joseph Kinyua – Appointed on 16/06/2009) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Fidesius M. Nyaga - Aram M. Mbui - Samuel M. Mwangi - Eliazar O. Ochola - Esau K. Kioni - Dr. Theodorah Malla-Kilukumi - Benn Khadiagala (Alternate to Patrick M. Nyoike)	Eng. Joseph K. Njoroge	Laurencia K. Njagi
2009/2010	• LTWP • Gulf Power • Thika Power • Triumph Power • Regen-Terem	Eliazar O. Ochola	- Joseph Kinyua (Principal Secretary, National Treasury) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Fidesius M. Nyaga - Esau K. Kioni - Dr. Theodorah Malla-Killukumi - Eng. Patrick E. O. Obath (W.e.f. 18/12/2009) - Macharia Kariuki (W.e.f. 18/12/2009) - Jacob K. Mwirigi (W.e.f. 18/12/2009)	Eng. Joseph K. Njoroge	Laurencia K. Njagi

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
	• Imenti • Gura		- Joseph Kariuki (Alternate to Joseph Kinyua) - Isaac N. Kiva (Alternate to Patrick M. Nyoike (Appointed on 15/12/2009) - Dr. Crowther N. Pepela (Retired on 18/12/2009) - Aram M. Mbui (Retired on 18/12/2009) - Samuel M. Mwangi (Retired on 18/12/2009)		
2010/2011	None	Eliazar O. Ochola	- Joseph Kinyua (Principal Secretary, National Treasury) - Joseph Kariuki (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Isaac N. Kiva (Alternate to Patrick M. Nyoike) - Fidesius M. Nyaga - Esau K. Kioni - Theodorah Malla-Kilukumi - Eng. Patrick E. O. Obath - Macharia Kariuki - Jacob K. Mwirigi	Eng. Joseph K. Njoroge	Laurencia K. Njagi
2011/2012	Kipeto	Eliazar O. Ochola	- Joseph Kinyua (Principal Secretary, National Treasury) - Eng. Joseph K. Njoroge (Alternate to Joseph Kinyua) - Patrick M. Nyoike (Principal Secretary, Ministry of Energy) - Eng. Isaac N. Kiva (Alternate to Patrick M. Nyoike) - Fidesius M Nyaga - Dr. Theodorah Malla-Kilukumi - Eng. Patrick E. O. Obath - Macharia Kariuki - Jacob K. Mwirigi - Esau K. Kioni (Left on 31st Aug 2012)	Eng. Joseph K. Njoroge	Laurencia K Njagi
2012/2013	PTSL	Eliazar O. Ochola	- Dr. Kamau Thugge (Principal Secretary, The National Treasury) - Eng. Joseph K. Njoroge MBS (Alternate to Dr. Kamau Thugge - Principal Secretary, Ministry of Energy & Petroleum) - Isaac N. Kiva (Alternate to Eng. Joseph K. Njoroge) - Dr. Theodorah Malla-Kilukumi	Dr. Ben K. Chumo, OGW (Ag. MD & CEO)	Beatrice Meso

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Jacob Mwirigi - Eng. Patrick E. O. Obath - Macharia Kariuki - Fatuma Hirsi Mohamed - Jane Apetet Nashida		
2013/2014	Strathmore	Eliazar O. Ochola	- Eng. Joseph K. Njoroge (Principal Secretary, Ministry of Energy & Petroleum) - Eng. Isaac N. Kiva (Alternate to Eng. Joseph K. Njoroge) - Dr. Kamau Thugge (Principal Secretary, The National Treasury) - Joseph Kariuki (Alternate to Dr. Kamau Thugge) - Dr. Theodorah Malla-Kilukumi - Jacob Mwirigi - Eng. Patrick E. O. Obath - Macharia Kariuki - Jane Apetet Nashida - Fatuma Hirsi Mohamed (Left on 10th March 2014)	Dr. Ben K. Chumo	Beatrice Meso
2014/2015	• Maindi Solar • Metumi • Chania	Hon. Kenneth Marende	- Henry Rotich (Cabinet Secretary, The National Treasury) - Eng. Joseph K. Njoroge (Principal Secretary, Ministry of Energy & Petroleum) - Joseph Kariuki (Alternate to Cabinet Secretary, The National Treasury) - Eng. Isaac N. Kiva (Alternate to Principal Secretary, Ministry of Energy & Petroleum) - Macharia Kariuki - Jane Nashida - Wilson Mugung'ei - Adil Khawaja - Susan Chesiyna	Dr. Ben K. Chumo	Beatrice Meso
2015/2016	• Cedate • HPSP • Selenkei	Hon. Kenneth Marende	- Henry Rotich (Cabinet Secretary, The National Treasury) - Eng. Joseph K. Njoroge (Principal Secretary, Ministry of Energy & Petroleum)	Dr. Ben K. Chumo	Beatrice Meso

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Joseph Kariuki (Alternate to Cabinet Secretary, The National Treasury) - Eng. Isaac N. Kiva (Alternate to Principal Secretary, Ministry of Energy & Petroleum) - Macharia Kariuki - Dr. Theodorah Malla-Kilukumi - Jane Nashida - Wilson Mugung'ei - Adil Khawaja		
2016/2017	Biojoule	Hon. Kenneth Marende	- Henry Rotich (Cabinet Secretary, The National Treasury) - Eng. Joseph K. Njoroge (Principal Secretary, Ministry of Energy & Petroleum) - Beatrice Gathirwa (Alternate Director to Cabinet Secretary, the National Treasury) - Eng. Isaac N. Kiva (Alternate Director to Principal Secretary, Ministry of Energy & Petroleum) - Wilson Mugung'ei - Adil Khawaja - Kairo Thuo - Brenda Eng'omo	Kenneth Tarus, PhD	Beatrice Meso
2017/2018	None	Amb (Eng) Mahboub Maalim Mohamed	- Henry Rotich (Cabinet Secretary, the National Treasury) - Dr. Eng. Joseph K. Njoroge (Principal Secretary, Ministry of Energy) - Beatrice Gathirwa (Alternate Director to Cabinet Secretary, the National Treasury) - Eng. Isaac N. Kiva (Alternate Director to Principal Secretary, Ministry of Energy) - Adil Khawaja - Wilson Kimutai Mugung'ei - Kairo Thuo - Brenda Engomo Kokoi	Eng. Jared Othieno (Acting MD & CEO)	Imelda Bore

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Hon. Zipporah Jesang Kering Composition of ICT & IPP Committee - S. Chesiyna – Chair - Dr. Eng. Joseph K. Njoroge / I. Kiva - Joseph Kariuki - Adil Khawaja - Dr. K. Tarus - S. Ndirangu - K.P. Mungai - Beatrice Meso (Secretary) - Rep. inspectorate of State Corporations		
2018/2019	None	Amb (Eng) Mahboub Maalim Mohamed	- Hon. Amb. Ukur Yattani (Cabinet Secretary, the National Treasury – He replaced Henry Rotich in July 2019) - Dr. Eng. Joseph Njoroge (Principal Secretary, Ministry of Energy - Beatrice Gathirwa (Alternate Director to Cabinet Secretary, the National Treasury) - Eng. Isaac Kiva (Alternate to Principal Secretary, Ministry of Energy) - Adil Khawaja (Resigned on 13th July 2020) - Wilson Mugung'ei - Resigned on 13th July 2020) - Kairo Thuo (Resigned on 13th July 2020) - Brenda Engomo (Resigned on 13th July 2020) - Hon. Zipporah Kering (Resigned on 13th July 2020) - Eng. Abdulrazaq Ali (Appointed on 20th July 2020) - Eng. Elizabeth Rogo (Appointed on 20th July 2020) - Caroline Kittony-Waiyaki (Appointed on 20th July 2020) - Vivienne Yeda (Appointed on 20th July 2020) - Sachen Gudka (Appointed on 20th July 2020) Composition of ICT & IPP Committee - Hon. Zipporah Kering (Chairperson)	Bernard Ngugi (Eng. Jared Othieno – was Acting MD & CEO until 28th October 2019)	Imelda Bore

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Eng. J.K. Njoroge / Eng. Isaac N. Kiva - Adil Khawaja - Dr. K. Tarus, PHD - GM, Corporate Affairs & CS (Secretary) - GM, Business Strategy (by invitation) - GM, ICT (by invitation) - Rep. inspectorate of State Corporations		
2019/2020	None	- Amb (Eng) Mahboub Mohamed (Ceased to be Chairman on 13th November 2020) - Vivienne Yeda (Appointed on 13th November 2020)	- Hon. Amb. Ukur Yattani (Cabinet Secretary, the National Treasury) - Dr. Eng. Joseph Njoroge (Permanent Secretary, Ministry of Energy) - Beatrice Gathirwa (Alternate Director to Cabinet Secretary, the National Treasury) - Eng. Isaac N. Kiva (Alternate to Principal Secretary, Ministry of Energy) - Adil Khawaja (Resigned on 13th July 2020) - Wilson Mugung'ei (Resigned on 13th July 2020) - Kairo Thuo (Resigned on 13th July 2020 and elected on 13th November 2020) - Brenda Engomo (Resigned on 13th July 2020) - Zipporah Kering (Resigned on 13th July 2020) - Eng. Abdulrazaq Ali (Appointed on 20th July 2020 and elected on 13th November 2020) - Eng. Elizabeth Rogo (Appointed on 20th July 2020 and elected on 13th November 2020) - Caroline Kittony-Waiyaki (Appointed on 20th July 2020 and elected on 13th November 2020) - Sachen Gudka (Appointed on 20th July 2020 and elected on 13th November 2020)	- Bernard Ngugi (Eng. Jared Othieno – was Acting MD & CEO until 28th October 2019)	Imelda Bore

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
2020/2021	None	- Amb (Eng) M. Mohamed (Ceased to be Chairman on 13th November 2020) - Vivienne Yeda (Appointed on 13th November 2020)	- Eng. Adulrazaq Ali (Appointed on 20th July 2020 and elected on 13th November 2020) - Hon. Amb. Ukur Yattani (Cabinet Secretary, the National Treasury) - Dr. Eng. Joseph Njoroge (Principal Secretary, Ministry of Energy) - Humphrey Muhu (Alternate Director to Cabinet Secretary, the National Treasury) - Beatrice Gathirwa (Replaced on 17th March 2021 as the Alternate Director to the Cabinet Secretary, the National Treasury) - Eng. Elizabeth Rogo (Appointed on 20th July 2020 and elected on 13th November 2020) - Caroline Kittony-Waiyaki (Appointed on 20th July 2020 and elected on 13th November 2020) - Sachen Gudka (Appointed on 20th July 2020 and elected on 13th November 2020) - Kairo Thuo (Resigned on 20th July 2020 and elected on 13th November 2020) - Adil Khawaja (Resigned on 13th July 2020) - Wilson Mugung'ei (Resigned on 13th July 2020) - Brenda Engomo (Resigned on 13th July 2020) - Hon. Zipporah Kering (Resigned on 13th July 2020)	- Bernard Ngugi (Resigned on 3rd August 2021 as the MD & CEO) - Eng. Rosemary Oduor (Appointed as Ag. MD & CEO on 3rd August 2021)	Imelda Bore
2021/2022	None	Vivienne Yeda	- Prof. Njuguna Ndung'u – (Cabinet Secretary, National Treasury & Economic Planning / Alt. Humphrey Muhu) - Alex Wachira (Principal Secretary, Ministry of Energy & Petroleum, State Department of Energy / Alt. Eng. Benson Mwakina) - Eng. Abulrazaq Ali (Resigned on 30th May 2022) - Eng. Elizabeth Rogo (Resigned on 30th May 2022) - Caroline Kittony-Waiyaki (Resigned on 30th May 2022) - Sachen Gudka (Resigned on 3rd December 2021) - Kairo Thuo (Appointed on 3rd December 2021)	- Benard Ngugi (Resigned on 3rd August 2021 as the MD & CEO) - Eng. Rosemary Oduor (Appointed on 3rd August 2021 as Ag. MD & CEO, and resigned on 17th May 2022)	Imelda Bore

Financial Year	Applicable PPA approval	Board Chair	Board Members	Managing Director / Chief Executive Officer	Company Secretary
			- Yida Kemoli (Appointed on 3rd December 2021) - Eng. Sarah Mbwaya (Appointed on 26th July 2022) - Brig (Rtd) James Gitiba (EBS) (Appointed on 26th July 2022) - Justice (Rtd) Aaron Ringera (EBS) (Appointed on 24th August 2022)	- Eng. Geoffrey Muli (Appointed on 17th May 2022 as Ag. MD)	

Appendix 2.2: Ministry of Energy and Ministry of Finance/ National Treasury Ministers/Cabinet Secretaries and Permanent/ Principal Secretaries from 1996 to 2022

Year	Applicable PPA Approval	Minister / Cabinet Secretary (MoE)	Permanent / Principal Secretary (MoE)	Minister / Cabinet Secretary (MoF)/NT	Permanent / Principal Secretary (MoF)
1996	Iberafrica	Darius Msagha Mbela	C.N Mutitu	Musalia Mudavadi	S.S Lesrima
1997	None	Kirugi Laiboni M'Mukindia	C.N Mutitu	Musalia Mudavadi	S.S Lesrima
1998	OrPower	Chrisantus Okemo	C.N Mutitu	Simeon Nyachae	M. Oduor Otieno
1999	None	Chrisantus Okemo	M. Ngali	Simeon Nyachae Francis Masakhalia Chris Okemo	M. Oduor Otieno
2000	None	Chrisantus Okemo Francis Lotodo	M. Ngali	Chrisantus Okemo	M. Oduor Otieno
2001	None	Francis Masakhalia Raila Odinga	Prof. W.M. Mwangi	Chrisantus Okemo Christopher Obure	Joseph Kinyua
2002	None	Raila Odinga	Patrick M. Nyoike	Christopher Obure	Joseph M. Magari
2003	None	Ochillo Ayacko	Patrick M. Nyoike	David Mwiraria	Joseph Kinyua
2004	None	Ochillo Ayacko Simeon Nyachae	Patrick M. Nyoike	David Mwiraria	Joseph Kinyua
2005	None	Simeon Nyachae Kiraitu Murungi	Patrick M. Nyoike	David Mwiraria	Joseph Kinyua
2006	Rabai Power	Kiraitu Murungi Henry Obwocha	Patrick M. Nyoike	David Mwiraria Amos Kimunya	Joseph Kinyua
2007	None	Kiraitu Murungi	Patrick M. Nyoike	Amos Kimunya	Joseph Kinyua
2008	None	Kiraitu Murungi	Patrick M. Nyoike	Amos Kimunya John Michuki	Joseph Kinyua
2009	• LTWP • Gulf Power • Thika Power • Triumph Power • Regen-Terem • Imenti • Gura	Kiraitu Murungi	Patrick M. Nyoike	John Michuki Uhuru Kenyatta	Joseph Kinyua

Year	Applicable PPA Approval	Minister / Cabinet Secretary (MoE)	Permanent / Principal Secretary (MoE)	Minister / Cabinet Secretary (MoF)/NT	Permanent / Principal Secretary (MoF)
2010	None	Kiraitu Murungi	Patrick M. Nyoike	Uhuru Kenyatta	Joseph Kinyua
2011	Kipeto	Kiraitu Murungi	Patrick M. Nyoike	Uhuru Kenyatta Robinson Njeru Githae	Joseph Kinyua
2012	PTSL	Kiraitu Murungi	Patrick M. Nyoike	Robinson Njeru Githae	Joseph Kinyua
2013	Strathmore	Kiraitu Murungi Davis Chirchir	Patrick M. Nyoike Eng. Joseph K. Njoroge	Robinson Njeru Githae Henry Rotich	Dr. Kamau Thugge
2014	• Maindi Solar • Metumi • Chania	Davis Chirchir	Eng. Joseph K. Njoroge	Henry Rotich	Dr. Kamau Thugge
2015	• Cedate • HPSP • Selenkei	Davis Chirchir Charles Keter	Eng. Joseph K. Njoroge	Henry Rotich	Dr. Kamau Thugge
2016	Biojoule	Charles Keter	Eng. Joseph K. Njoroge	Henry Rotich	Dr. Kamau Thugge
2017	None	Charles Keter	Eng. Joseph K. Njoroge	Henry Rotich	Dr. Kamau Thugge
2018	None	Charles Keter	Eng. Joseph K. Njoroge	Henry Rotich	Dr. Kamau Thugge
2019	None	Charles Keter	Eng. Joseph K. Njoroge	Henry Rotich Ukur Yattani	Dr. Kamau Thugge Dr. Julius Muia
2020	None	Charles Keter	Eng. Joseph K. Njoroge	Ukur Yattani	Dr. Julius Muia
2021	None	Charles Keter Monica Juma	Eng. Joseph K. Njoroge	Ukur Yattani	Dr. Julius Muia
2022	None	Monica Juma Davis Chirchir	Alex Wachira	Ukur Yattani Njuguna Ndung'u	Dr. Julius Muia Chris K. Kiptoo

Appendix 2.3: ERB Board Chair, Director Generals and Commission Secretaries from 1996 to 2022

Year	Applicable PPA Approval	Board Chair	Director General	Commission Secretary
1996	Iberafrica			
1997	None	Moses Wetangula (CEO and Chairman)	Moses Wetangula(CEO and Chairman)	Philemona Mwilu
1998	OrPower	Moses Wetangula (CEO and Chairman)	Moses Wetangula(CEO and Chairman)	Philemona Mwilu
1999	None	Moses Wetangula (CEO and Chairman)	Moses Wetangula (CEO and Chairman)	Philemona Mwilu
2000	None	Moses Wetangula	Moses Wetangula(CEO and Chairman)	Philemona Mwilu
2001	None	Moses Wetangula	Moses Wetangula(CEO and Chairman)	Philemona Mwilu
2002	None	George Mitine (CEO and Chairman)	George Mitine (CEO and Chairman	Catherine A. Kola
2003	None	Jeremiah Murithi (CEO and Chairman)	Jeremiah Murithi (CEO and Chairman)	Catherine A. Kola
2004	None	Eng. Isaac Bondet (Executive Chairman and CEO)	Eng. Isaac Bondet (Appointed Executive Chairman and CEO	Catherine A. Kola
2005	None	Mr. Matere Keriri (Chairman and CEO)	Mr. Matere Keriri (Appointed as CEO and Chairman)	Catherine A. Kola
2006	None	Mr. Matere Keriri	Mr. Matere Keriri	Catherine A. Kola
2007	Rabai	Mr. Hindpal Singh Jabbal	Eng. Kaburu Mwirichia	Catherine A. Kola
2008	None	Mr. Hindpal Singh Jabbal	Eng. Kaburu Mwirichia	Catherine A. Kola
2009	• LTWP • Regem-Terem • Imenti	Mr. Hindpal Singh Jabbal	Eng. Kaburu Mwirichia	Mueni Mutunga
2010	None	Mr. Hindpal Singh Jabbal	Eng. Kaburu Mwirichia	Mueni Mutunga
2011	None	Eng. Emma Kiilu	Eng. Kaburu Mwirichia	Mueni Mutunga
2012	• Triumph Power • Gulf Power • Thika Power • PTSL • Guta Power	Eng. Emma Kiilu	Eng. Kaburu Mwirichia	Mueni Mutunga
2013	None	Eng. Emma Kiilu	Dr. Frederick Nyang (Ag. Director General)	Mueni Mutunga
2014	• Chania • Metumi	Eng. Emma Kiilu	Eng. Joseph Ng'ang'a	Mueni Mutunga

Year	Applicable PPA Approval	Board Chair	Director General	Commission Secretary
2015	• Strathmore • Biojoule • Kipeto	Eng. Emma Kiilu	Eng. Joseph Ng'ang'a	Mueni Mutunga
2016	HSPS	Mr. Joshua Oigara	Eng. Joseph Ng'ang'a	Mueni Mutunga
2017	• Cedate • Malindi • Selenkei	Mr. Joshua Oigara	Mr. Pavel Oimeke	Mueni Mutunga
2018	None	Mr. Joshua Oigara	Pavel Oimeke	Mueni Mutunga
2019	None	Mr. Joshua Oigara	Pavel Oimeke	Mueni Mutunga
2020	None	Hon. Justice (Prof) Jackton B. Ojwang	Daniel Kiptoo Bargoria (Acting)	Mueni Mutunga
2021	None	Hon. Justice (Prof) Jackton B. Ojwang	Daniel Kiptoo Bargoria	Mueni Mutunga
2022	None	Hon. Justice (Prof) Jackton B. Ojwang	Daniel Kiptoo Bargoria	Mueni Mutunga

Appendix 3: List of documents not provided by the date the report was compiled

Appendix 3.1: Report 2: Applicable Laws and regulations

Section	IPP	Documents not provided by the date the report was compiled
3.1 Procurement per Government of Kenya circulars before 2001	Iberafrica	• Documentation with the basis under which Westmont and Iberafrica were awarded the contract.
	Orpower	• Evidence of approval of awarding Olkaria III project to Orpower
3.3 Competitive tendering between 2005 and 2009	Rabai	• Evidence of the tender advertisement • Evidence of appointment of the tender opening committee by the MD • The set criteria used by KPLC to confirm the eligibility of the successful bidders before awarding them the contract • Notification of award to Rabai and regret notifications to unsuccessful bidders
	Triumph	• RFP • Evidence of appointment of the tender opening committee by the MD • The set criteria used by KPLC to confirm the eligibility of the successful bidders before awarding them the contract • Notification of award to Triumph and regret notifications to unsuccessful bidders
	Gulf	• RFP • Evidence of appointment of the tender opening committee by the MD • The set criteria used by KPLC to confirm the eligibility of the successful bidders before awarding them the contract
	Thika	• RFP • Evidence of appointment of the tender opening committee by the MD • The set criteria used by KPLC to confirm the eligibility of the successful bidders before awarding them the contract • Notification of award to Melec and regret notifications to unsuccessful bidders

3.4 Procurement under FiT policy between March 2008 – to 2012	PTSL, Imenti, Malindi, Biojoule and Regen-Terem	• IPPs proposals and feasibility studies - KPLC indicated that they were in the custody of MOE.
3.5 Procurement under PPD(PPP) Regulations, 2009 model between 30 March 2009 to 8 February 2013	PTSL	• The set schemes that were to be complied with by the IPPs i.e Management contract; Lease arrangement; Concession for a period not exceeding thirty years; Build-Own Operate-Transfer (BOOT) scheme; Build-Own-Operate (BOO) scheme; and such other schemes as prescribed by the PPP Steering Committee and approved by the Cabinet. • Evidence of approval of the project by the PPP Steering committee • The feasibility studies and bid submitted.
	Regen-Terem	• The set schemes that were to be complied with by the IPPs i.e Management contract; Lease arrangement; Concession for a period not exceeding thirty years; Build-Own Operate-Transfer (BOOT) scheme; Build-Own-Operate (BOO) scheme; and such other schemes as prescribed by the PPP Steering Committee and approved by the Cabinet. • Evidence of approval of the project by the PPP Steering committee • The feasibility studies and bid submitted. • PPP steering committee approval of the amendments to the PPA
	Imenti	• The set schemes that were to be complied with by the IPPs i.e Management contract; Lease arrangement; Concession for a period not exceeding thirty years; Build-Own Operate-Transfer (BOOT) scheme; Build-Own-Operate (BOO) scheme; and such other schemes as prescribed by the PPP Steering Committee and approved by the Cabinet. • Evidence of approval of the project by the PPP Steering committee • The feasibility studies and bid submitted.
	Kipeto	• The set schemes that were to be complied with by the IPPs i.e Management contract; Lease arrangement; Concession for a period not exceeding thirty years; Build-Own Operate-Transfer (BOOT) scheme; Build-Own-Operate (BOO) scheme; and such other schemes as prescribed by the PPP Steering Committee and approved by the Cabinet. • Evidence of approval of the project by the PPP Steering committee

		• The bid submitted. • Evidence of the Letter Of Support recommendation by the PPP steering committee and the rationale thereof
3.6 Procurement under PPP Act, 2013 between 2013 and 2015	Metumi, Gura, Chania	• Approval by the PPP Committee before the PPP arrangement was entered into • Metumi Feasibility study • MOEP approval • Approval of the feasibility studies by the PPP Committee • Evidence of how Privately Initiated Investment Proposals conditions were assessed • Approval of the revalidated PPAs by the PPP committee
	Biojoule	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement • Feasibility study • MOEP approval • Approval of the feasibility studies by the PPP Committee • Evidence of how Privately Initiated Investment Proposals conditions were assessed
	Cedate	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement • Evidence of how Privately Initiated Investment Proposals conditions were assessed • Approval of deed of variation by the PPP committee
	Malindi	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement • Evidence of how Privately Initiated Investment Proposals conditions were assessed • Approval of deed of variation by the PPP committee
	Selenkei	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement

		• Evidence of how Privately Initiated Investment Proposals conditions were assessed • Approval of deed of variation by the PPP committee
	Strathmore	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement • Approval of the feasibility studies by the PPP Committee • Evidence of how Privately Initiated Investment Proposals conditions were assessed • Approval of the amended PPA by the PPP committee
	HPSPL	• Approval by the PPP Committee Committee before KPLC undertook the steps towards entering into the the PPP arrangement • Evidence of how Privately Initiated Investment Proposals conditions were assessed
5.Governance & Oversight over PPAs	-	• The Power Purchase and Planning (PPP) division structure and underlying roles and responsibilities
Other documents not availed	OrPower	• Electrical power generation licence dated 16 September 2015
	Power Technology Solutions Limited	• Electrical power generation licence

Appendix 3.2: Report 3: IPP Selection Criteria – Events Chronology

Iberafrica Power Company Limited	Documents not provided by the date the report was compiled
Board approval - Negotiated PPA	• The minutes of the Board approval of the negotiated and signed PPA dated 16 August 1996
Energy Regulatory Board (ERB) approval - Negotiated PPA	• ERB Approval for the negotiated PPA dated 16 August 1996
First supplemental agreement to the PPA dated 16 August 1996	• Circulars and Board approvals relating to the 1st supplemental agreement to the PPA dated 16 August 1996 were not shared. KPLC indicated 1990 – 2001 Board Minutes were indicated as having been taken by Ethics and Anti-Corruption Commission (EACC) and had not been returned yet, and therefore

	could not be availed for our review. The first supplemental agreement is dated 1 December 1997.
Second supplemental agreement to the PPA dated 16 August 1996	• Circulars and the minutes of the Board approvals relating to the 2nd supplemental agreement to the PPA dated 16 August 1996
Third supplemental agreement to the PPA	• Documentation on how the negotiations on the tariffs were concluded and whether Iberafrica agreed to the terms or tariff to be changed • The minutes of the Board approval of the Third supplemental agreement to the PPA • ERC approval of the Third supplemental agreement to the PPA. The third supplemental agreement is dated 24 August 2004
PPA Dated 21 October 2004	• Board Approval for the PPA dated 21 October 2004
ERC approval - Amended and Restated PPA 2007	• Correspondence on how the approved capacity increase of 50MW subsequently increased to 52.5MW
Legal opinion on approval of the IPP by the Steering Committee	• Correspondence relating to the guidance provided by MoE with regards to the legal opinion
Waiver of low availability penalties and other charges on Iberafrica	• The minutes of the Board approval of the waiver of low availability penalties and other charges
OrPower 4 Inc	Documents not provided by the date the report was compiled
Solicitation of Bids by MoE	• The Expression of Interest (EOI) advertised by the MoE and the other two companies who submitted their bids
Bid Evaluation and Negotiation	• The Proposals submitted by the bidders
The negotiated PPA	• The minutes of the Board approval of the negotiated PPA • ERC approval of the negotiated PPA. The signed PPA document shared is dated 5 November 1998
1st Supplemental Agreement to the PPA	• Minutes of the Board approval of the 1st Supplemental Agreement to the PPA and the content therein • The First Supplemental Agreement to the PPA dated 5 November 1998

1st Amended and Restated PPA, 2006	• The outcome of the negotiations of the Board IPP Committee with OrPower on the final tariff and the minutes of the Board approval for the first amended and restated PPA • ERC approval for the first amended and restated PPA
2nd Amended and Restated PPA, 2006	• The minutes of the Board approval for the Second Amended and Restated PPA • Documentation regarding the outcome of the negotiations on Expansion of the 48MW Olkaria III Geothermal plant to 100MW and the approvals thereto • Documentation regarding whether OrPower was paid the special tariff - An extract of Board minutes for the meeting held on 29 June 2012 indicated that the MoE PS, Patrick Nyoike, reported that OrPower4 had requested to be paid a special tariff for one year for them to accelerate the development of 36MW
Expansion of Olkaria III to 150MW 3rd Amended and Restated PPA	• The letter from MoE dated 28 March 2014 where guidance was given to engage OrPower4 with a view of leveraging on the development of additional geothermal capacity due to its competitive tariff • The minutes of the Board approval for the Third Amended and Restated PPA. The Third Amended and Restated Agreement is dated 26 November 2014.
The 3rd Amended and Restated PPA, the 1st Amendment	• The minutes of the Board approval for the Third Amended and Restated PPA – 1st amendment
Rabai Power Limited	**Documents not provided by the date the report was compiled**
Contracting	• The proposals submitted by the bidders • Board minutes for 1 August 2007 where Simba Energy Limited was awarded a contract for development of an 80-90 MW • The two letters from the PS Patrick Nyoike, MoE letter dated 20 September 2007 and National Treasury letter dated 02 July 2007 on the court case regarding the award of the tender to the consortium of BWSC/ Aldwych • The report of the committee appointed to review the country's immediate and short-term power capacity requirements • The two letters from Simba Energy dated 9 December 2009 and 28 December 2009 that were tabled and the committee resolved to withdraw the offer

	made by KPLC since Simba Energy had not accepted the capacity charge rate of US$ 235/kW/yr plus 10% increase • The minutes of the Board approval of the negotiated PPA. The signed PPA is dated 27 February 2007.
Amended and Restated PPA, 2008	• ERC approval of the Rabai Power Amended and Restated PPA, 2008. The amended and restated PPA is dated 4 September 2008. • Board approval for the SBLC
Amendment Deed, 2016	• The letter dated 9 February 2015, where ERC approved the revision of the minimum calorific value to 40,585 kJ/kg. The amendment deed is dated 3 October 2016
Lake Turkana Wind Power Limited	**Documents not provided by the date the report was compiled**
Unsolicited Proposal Under PPP	• The LTWP proposal and MoE instruction to KPLC to negotiate with LTWP
Board Approval - the negotiated PPA, 2010	• The MoE letter instructing that of the energy charge rate of Euro cents 7.22/kWh, KPLC would absorb only US cents 3.00 kWh while the balance would-be pass-through costs to the customers • The report containing comments and recommendations by Director, Mr. Aram Mbui
1st Amended and Restated PPA, 2011	• The outcome of the team tasked with reviewing the results of the studies by KEMA consulting of the Netherlands and recommendations thereof • The PPA dated 12 August 2011 - However, Board Circular no. 27/12 dated 12 July 2012 and signed by Eng. Eng. Joseph K Njoroge indicates that the PPA for LTWP was signed on 29 September 2011, the same date as the amended and restated PPA, 2011.
2nd Amended and Restated PPA, 2012	• The report submitted by Linklaters of the United Kingdom who were contracted by KPLC as the legal advisers on 27 December 2011 and SAIC Energy, Environmental, and Infrastructure of the United States who were contracted as the technical advisers on 10 February 2011
1st PPA Variation of the Amended and Restated PPA, 2014	• The ERC approval for the 1st PPA variation. The amended and restated PPA variation, 2014, is dated 31 July 2014.

Gulf Power Limited	Documents not provided by the date the report was compiled
Amended PPA,2012	• ERC approval of the amended PPA • The PPA dated 5 June 2012
Amended PPA, 2013	• ERC approval of the PPA amended in 2013. The PPA is dated 17 December 2012.
Strathmore University	**Documents not provided by the date the report was compiled**
Contracting	• The MoE letter dated 21 November 2013 where approval was granted to KPLC to commence negotiations
1st Amended and Restated PPA	• The ERC approved the amended PPA on 6 September 2017. The amended and Restated PPA
Power Technology Solutions Limited	**Documents not provided by the date the report was compiled**
Signing of Board Resolutions	• The resolutions signed by the Board members approving the PPA
Regen Terem SHPP Limited	**Documents not provided by the date the report was compiled**
Contracting	• The feasibility studies undertaken • The initial signed PPA - KPLC submitted the negotiated PPA to ERC on 01 September 2009. ERC approved the PPA on 24 September 2009. The ERC approval was signed off by the Director-General Eng. Kaburu Mwirichia and Mueni Mutung'a, the Commission Secretary.
1st Amended and Restated PPA	• The minutes of the Board approval for the 1st Amended and Restated PPA, 2014. The signed PPA is dated 24 January 2014.
Biojoule Limited	**Documents not provided by the date the report was compiled**
Board Approval	• The minutes of the meeting where the ICT & PPA Committee and the Board approved the PPA • The minutes of the Board where the PPA was approved
Cedate Limited	**Documents not provided by the date the report was compiled**
Proposal to GOK	• The proposal by Cedate Limited to GOK

Board Approvals	• The resolutions signed by the Board members approving the PPA. The signed PPA agreement is dated 05 June 2017.
Deed of Variation	• The KPLC letter to Cedate dated 11 October 2017 • Further correspondence between the Solicitor General and the PS, National Treasury and Planning, on the Charging of and assigning rights, title, interest, and benefit in and to the GOK letter and how eventually resolved
Hydro Project Service Peters Limited	**Documents not provided by the date the report was compiled**
Proposal to GOK	• The proposal by HPSP to the GOK and the letter of approval by MoEP dated 14 September 2015
Board Approval	• The resolutions signed by the Board members approving the PPA
Kipeto Energy Limited	**Documents not provided by the date the report was compiled**
Proposal to GOK	• The proposal by Kipeto to GOK
Board Approval	• . The minutes where the ICT & PPA committee of the Board committee recommended the PPA for approval
Deliberations and way forward on the disputes between Kipeto and KPLC	• Evidence or correspondence on how the issues were addressed - Per discussion with KPLC PPP division team on 5 May 2022, the issues were addressed and Kipeto is currently supplying power to KPLC.
Proposal to the MoEP	• The proposal by VIHK to GOK and the feasibility studies undertaken
Board Approvals	• The minutes of the meeting where the ICT & PPA Committee approved the PPA • The resolutions signed by the Board members approving the PPA
Selenkei Investments Limited	**Documents not provided by the date the report was compiled**
Proposal to GOK	• The proposal by Selenkei to GOK, and the letter of approval dated 06 July 2015
Board Approval	• The resolutions signed by the Board members approving the PPA

Deed of Variation	• Letter dated 18 March 2018 where Selenkei objected to the tariff review request. • Further correspondence between the Solicitor General and the PS, National Treasury and Planning, on the Charging of and assigning rights, title, interest, and benefit in and to the GOK letter and how eventually resolved
Chania Power Company, Metumi Power Company, and Gura Power Company Limited	**Documents not provided by the date the report was compiled**
Contracting	• Documentation about how KPLC signed initial PPAs with the three KTDA SHPs
Board Approvals	• The minutes of the Board approvals of the negotiated PPAs
PPA expiry and revalidation	• The revalidated PPAs for Chania Power Company Limited and Metumi Power Company Limited

Appendix 3.3: Report 4: Conditions Precedent in PPAs - Summary of CPs whose supporting documents confirming fulfilment were not/were partially provided by the date this report was compiled

Condition Precedent	Documents not provided by the date the report was compiled
Iberafrica Power Company Limited	
a) The PPA was approved by the Energy Regulatory Commission.	• MOE approval of the initial PPA dated 16 August 1996..
	• ERB approval of the first supplemental agreement to the initial PPA dated 01 December 1997. .
	ERB approval of the third supplemental agreement to the initial PPA dated 25 August 2004.What was shared was conditional approval for this third supplement agreement through a letter dated 22 April 2003, signed by the ERB executive chairman, Engineer Isaac K. Bondet. In the letter, it is indicated that the Board expected to receive the initialled draft supplement agreement for its approval.

Condition Precedent	Documents not provided by the date the report was compiled
b) Parties have received a commitment from the ERC that sufficient revenues will be generated through the KPLC retail tariffs to allow full recovery by KPLC costs required to meet payments under this agreement including the Pass-Through Costs Facility.	• Commitment from the ERC that sufficient revenues will be generated through the KPLC retail tariffs to allow full recovery by KPLC costs required to meet payments under this agreement including the Pass-Through Costs Facility
OrPower 4 Inc	
a) The grant to the seller of geothermal resources licence for the licence area necessary for the geothermal reservoir development.	• Geothermal Resources License
c) The granting to the seller of a water permit.	• Water permit in accordance with the Water Act 1952
d)The seller providing to KPLC such documentary evidence as shall reasonably satisfy KPLC that the seller has or has access to such funds as are necessary for the conduct of the appraisal works and construction of the early generation facility in accordance with the terms of this agreement. Such documentary evidence shall include evidence of all loans, grants or other financing arrangements as the seller shall have procured.	• Documentary evidence from the seller that reasonably satisfies KPLC that the seller has or has access to such funds as are necessary for the conduct of the appraisal works and construction of the early generation facility in accordance with the terms of this agreement. Such documentary evidence shall include evidence of all loans, grants or other financing arrangements as the seller shall have procured.
Other documents not availed for our review	• First supplemental agreement to the original PPA, dated 21 July 2000. • Second supplemental agreement to the original PPA, dated 17 April 2003. • First amendment agreement (Amendment and termination agreement) dated 30 October 2015.
Rabai Power Limited	
a) The agreement is approved by the ERB, and a commitment has been received from the ERB that sufficient revenues will be generated through the electricity retail tariff to support the required payments under this agreement.	• ERC's approval of the initial PPA dated 01 February 2007
c) The construction security is lodged by the seller with KPLC	• Lodged construction security

Condition Precedent	Documents not provided by the date the report was compiled
g) The parties have reached agreement on the terms of tender documents for the procurement of the fuel supply agreement (including the draft terms of the fuel supply agreement)	• Correspondence between the buyer and the seller on the agreed terms of the tender documents for the procurement of the fuel supply agreement and the fuel supply agreement • What was provided was a Letter from KPLC to Rabai Power dated 05th June 2020, giving their comments on the tender evaluation report for fuel and a Letter from Rabai power to KPLC, dated 10th June 2020, replying to the letter sent by KPLC on 05th June 2020 on the issues raised by KPLC on the tender evaluation report for fuel.
h) The seller has been given vacant possession of the site and each of the seller and KPLC are reasonably satisfied with the manner in which all individuals who may be affected by the project have been, or are to be, treated and compensated by KPLC in accordance with all applicable standards.	• Evidence of how KPLC became "reasonably satisfied with the manner in which all individuals who may be affected by the project have been, or are to be, treated and compensated by KPLC in accordance with all applicable standards" was not availed for review.
Other documents not availed for our review	• Initial PPA dated 01 February 2007.
Lake Turkana Wind Power Ltd	
a) This agreement has been approved by the ERC.	• ERC's approval of the first variation to the third amended and restated PPA dated 31 July 2014.
c) A commitment has been received in writing from the ERC that approved retail tariffs will be just and reasonable pursuant to the provisions of the Energy Act, 2006 and further a confirmation has been received in writing from the ERC that it has approved the security support rate and the charging of the security support charges in accordance with this agreement.	• A commitment in writing from the ERC that approved retail tariffs will be just and reasonable pursuant to the provisions of the Energy Act, 2006 • Confirmation in writing from the ERC that it has approved the security support rate and the charging of the security support charges in accordance with this agreement.
d) KPLC, LTWP, and the Escrow agent have executed the Escrow agreement.	• The 50MW confirmation certificate confirming the 50 MW Net Electrical Output Delivery

Condition Precedent	Documents not provided by the date the report was compiled
	• The signed mandate letter
f) LTWP has completed the Environmental impact assessment to the satisfaction of the relevant government authorities.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences
g) The construction security has been lodged by LTWP with KPLC.	• Lodged construction security
i) The GOK support letter has been executed by GOK and LTWP, shall be in full force and effect and a legal opinion has been obtained by LTWP from the Attorney General as legal counsel of the GOK (in a form acceptable to LTWP) confirming, inter alia, the validity of the GOK support letter and that the transactions contemplated therein on the part of GOK are in accordance with all applicable laws of Kenya.	• The schedule of amendments to the first letter of support dated 26 March 2011 • A legal opinion obtained by LTWP from the Attorney General as legal counsel of the GOK (in a form acceptable to LTWP) confirming, inter alia, the validity of the GOK support letter and that the transactions contemplated therein on the part of GOK are in accordance with all applicable laws of Kenya was not provided to us as of the date of compiling this report.
j) LTWP has delivered to KPLC certified true copies of resolutions of the board of directors of LTWP approving this agreement.	• Evidence of delivery to the buyer of certified true copies of resolutions of the board of directors of LTWP
k) KPLC has delivered to LTWP certified true copies of resolutions of the board of directors of KPLC approving this agreement.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of KPLC
Triumph Power Generating Company Limited	
e) The seller has completed the environmental impact assessment to the satisfaction of the relevant governmental authorities and has been granted with a licence from NEMA in relation to the project.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences • Licence from NEMA in relation to the project
f) The parties have agreed on the terms of the tender documents including the draft fuel supply agreement in respect of the first fuel supply tender.	• Evidence of agreement by both parties to the terms on the tender documents and the draft fuel supply agreement for the first fuel supply tender. What was availed was a. The HFO tender evaluation report shared with KPLC vide a letter dated 16 August 2019. The letter was addressed to the KPLC GM, Business Strategy and sent by Siva K. Shankar, the GM, Triumph. The letter

Condition Precedent	Documents not provided by the date the report was compiled
	noted that RV Devani Limited was evaluated as the most responsive bid with the lowest quoted price. Triumph was seeking concurrence from the KPLC GM, Business Strategy before commencing discussions on the fuel agreement. b. A letter dated 22 August 2019 addressed to Kota S. Shankar, the GM at Triumph. The letter was from Engineer T Kiiru, the acting GM, Business Strategy and noted that KPLC had reviewed the tender evaluation report from Triumph and had no objection the award of the HFO supply contract to RV Devani Limited. The letter also outlined the rates that KPLC expected to be outlined on the fuel supply agreement.
i) The seller has delivered to KPLC certified true copies of resolution of the board of directors of the seller approving this agreement.	• Evidence of delivery to the buyer of certified true copies of resolutions of the board of directors of the seller
j) KPLC has delivered to the seller certified true copies of resolution of the board of directors of KPLC approving this agreement.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of the buyer
l) KPLC and the seller have entered into a sublease, in the agreed form, in relation to the area of the site on which the KPLC connection facilities are located.	• Sublease agreement between KPLC and the seller for the site on which the KPLC connection facilities are located
Gulf Power Limited	
d) The seller has completed the environmental impact assessment to the satisfaction of the relevant governmental authorities.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences
g) KPLC has approved the initial fuel supply tender documents including draft fuel supply agreement.	• Evidence of approval of the initial fuel supply tender documents including the draft fuel supply agreement by KPLC What was availed was a letter dated 20 July 2020 that was addressed to Norman Wanyiri, the Gulf GM. The letter was sent by Engineer Charles Mwaura, the KPLC GM, Network Management and indicated that Gulf could proceed and negotiate a fuel supply agreement with Vivo Energy (K) Limited provided that the resultant price components would not exceed those provided on the tender evaluation

Condition Precedent	Documents not provided by the date the report was compiled
	report. KPLC also expected the negotiated fuel prices to be fixed for the term of the fuel supply agreement.
Thika Power Limited	
d) The seller has completed the environmental impact assessment to the satisfaction of the relevant governmental authorities.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences What was availed was a preliminary environmental and social impact analysis report dated 08 October 2009. The report was signed by Walter Barong Nyatwang'a – then, an environmental and social specialist at KPLC.
g) The initial fuel supply tender shall have been agreed.	• Evidence of concurrence by the seller and the buyer on terms included on the fuel supply agreement and the signed initial fuel supply tender What was availed was a letter dated 22 February 2013 from the Chairman, Thika Power addressed to the MD, KPLC, noting that Thika Power had completed the financial and technical evaluation of the fuel supply tender and intended on awarding it to Gulf Energy Limited.
Strathmore University	
Other Documents not provided.	The amended PPA dated 03 August 2017
Power Technology Solutions Limited	
b) The generating licence in respect of the plant is issued to the seller.	• Energy generating licence
Regen-Terem SHPP Limited	
a) This agreement is approved by ERC	• The PPA submitted to and approved by the ERC on 24 September 2009.
Biojoule Limited	
b) The seller delivering to the buyer certified true copies of resolutions of its board of directors approving the terms of this agreement.	• Evidence of delivery to the buyer of certified true copies of resolutions of the board of directors of the seller

Condition Precedent	Documents not provided by the date the report was compiled
c) The buyer delivering to the seller a legal opinion from the legal counsel of the buyer (in the form acceptable to the seller) confirming, inter alia, the validity of this agreement and that the transactions contemplated therein are in accordance with and compliant with all legal requirements provided that the cost of procuring such legal opinions shall be borne by the seller.	• Legal opinion from the legal counsel of the buyer confirming, inter alia, the validity of this agreement and that the transactions contemplated therein are in accordance with and compliant with all legal requirements provided that the cost of procuring such legal opinions shall be borne by the seller
d) The buyer delivering to the seller certified true copies of resolutions of its board of directors approving the transaction agreement to which it is a party.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of the buyer. What was provided was an extract of the minutes of the Board meeting held on 09 December 2014 where the Board approved the negotiated PPA between KPLC and Biojoule. The Board also approved the execution of this PPA, under the common seal of KPLC.
e) The GOK support letter has been issued by GOK to the seller and shall be in full force and effect, and a legal opinion has been obtained by the seller from the Attorney General as legal counsel to the GOK (in a form acceptable to the seller) confirming, inter alia, the validity of the GOK support letter and that the transactions contemplated therein on the part of GOK are in accordance with and compliant with all legal requirements.	• GOK support letter
Cedate Limited	
a) The agreement is approved by the ERC and a commitment has been received from the ERC that approved retail tariffs will be just and reasonable pursuant to the provisions of the Energy Act, 2006.	• The instruments of approval dated 25 January 2017 and 27 June 2018 did not include the commitment from ERC that the approved retail tariffs will be just and reasonable pursuant to the Energy Act, 2006. To share commitment received from ERC
d) Legal opinion having been obtained from the legal counsel to the buyer (in the form acceptable to the seller and at the seller's cost) confirming, inter alia, the validity of this agreement and that the	• Legal opinion from the buyer What was provided was a legal opinion on the Deed of Adherence for the development of the 40MW solar plant by Cedate, prepared by KPLC Ag GM,

Condition Precedent	Documents not provided by the date the report was compiled
transactions contemplated therein are in accordance with all applicable laws of Kenya.	Corporate Affairs & Company Secretary, Imelda Bore. In addition, a legal opinion dated 20 November 2018, signed off by P Kihara Kariuki, Attorney General and addressed to Cedate, European Investment Bank, and Nederlandse Financierings-Maarschappij voor Ontwikkelingslanden was availed N.V. The legal opinion was of the Attorney General concerning the GOK letter of support to Cedate on the 40MW solar plant.
e) The seller has delivered to the buyer certified true copies of resolutions of the board of directors of the seller approving this agreement.	• Evidence of delivery to the buyer of certified true copies of resolutions of the board of directors of the seller
f) The buyer has delivered to the seller certified true copies of resolutions of the board of directors of the buyer (or such other equivalent corporate authority as may have been executed) approving this agreement.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of the buyer.
Other documents not provided	• Further correspondence between the Solicitor General and the PS, National Treasury and Planning, on the charging of and assigning rights, title, interest and benefit in and to the GOK letter to Cedate's lenders and how eventually resolved.
Kipeto Energy Limited	
a) KPLC approves in accordance with clause 3.8, the proposed design, functional specifications, operating characteristics and warranty protections in respect of the KPLC connection facilities and further KPLC and the seller agree on the amount and mode of payment in respect of any increased costs payable by KPLC pursuant to clause 3.8 (b) (the "KPLC connection facilities approved requirements).	• Evidence of approval of the proposed design, functional specifications, operating characteristics and warranty protections in respect of the KPLC connection facilities • Seller agreement of the mode of payment in respect of any increased costs payable by KPLC pursuant to clause 3.8 (b) (the "KPLC connection facilities approved requirements).

Condition Precedent	Documents not provided by the date the report was compiled
b) The agreement is approved by the ERC and a commitment has been received from the ERC that approved retail tariffs will be just and reasonable pursuant to the provisions of the Energy Act, 2006.	• The instruments of approval dated 26 February 2015 and 04 March 2015 did not include the commitment from ERC that the approved retail tariffs will be just and reasonable pursuant to the Energy Act, 2006. To share commitment received from ERC.
c) The ERC has confirmed in writing the appropriate derogations from the Kenya Electricity Grid Code for the plant (in such form as is acceptable to the financing parties and seller).	• ERC's confirmation of the appropriate derogations from the Kenya Electricity Grid Code for the plant (in such form as is acceptable to the financing parties and seller).
f) The seller has completed the environmental impact assessment to the satisfaction of the relevant governmental authorities and obtained the necessary environmental authorizations.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences • The Environmental impact assessment report • Necessary Environmental approvals received by the seller
h) Legal opinions from the legal counsel of KPLC (in the form acceptable by the seller) and the seller confirming, inter alia, the incorporation of each party, the validity of this agreement and that the transactions contemplated herein are in accordance with all applicable laws of Kenya having been obtained provided that the costs of procuring such legal opinions shall be borne by each party.	• Legal opinions from the legal counsel of KPLC (in the form acceptable by the seller) and the seller
i) The seller has delivered to KPLC certified true copies of the resolution of the board of directors of the seller approving this agreement.	• Evidence of delivery to the buyer of certified true copies of resolutions of the board of directors of the seller
j) KPLC has delivered to the seller certified true copies of the resolution of the board of directors of KPLC approving this agreement.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of the buyer. What have been provided are the Board approvals without evidence that such approvals were delivered to the seller.

Condition Precedent	Documents not provided by the date the report was compiled
m) All necessary land use rights and wayleaves required for the construction and operation of the KPLC connection facilities have been obtained by the seller.	• Land use rights and wayleaves issued
Malindi Solar Group Limited	
e) The seller having completed the environmental and social impact assessment to the satisfaction of the relevant government authorities.	• Evidence of satisfaction of the government authorities by the Environmental impact assessment report e.g., correspondences
f) The energy regulatory commission has confirmed in writing the appropriate derogations from the Kenya Electricity Grid Code for the plant.	• ERC's confirmation of the appropriate derogations from the Kenya Electricity Grid Code for the plant
Selenkei Investments Limited	
d) Legal opinion having been obtained from the legal counsel to the buyer (in the form acceptable to the seller and at the seller's cost) confirming, inter alia, the validity of this agreement and that the transactions completed therein are in accordance with all applicable laws of Kenya.	• Legal opinion obtained from the legal counsel to the buyer What was shared was a draft copy (with a draft watermark) of the legal opinion concerning the GOK letter of support dated 04 August 2017.
f) The buyer has delivered to the seller certified true copies of resolutions of the board of directors of the buyer (or such other equivalent corporate authority as may have been executed) approving this agreement.	• Evidence of delivery to the seller of certified true copies of resolutions of the board of directors of the buyer What was provided was Board approvals without evidence that such approvals were delivered to the seller.
g) The seller has deposited the construction security with the buyer.	• Construction security deposited by the buyer
h) If required pursuant to a legal requirement, the buyer has obtained procurement approvals of waivers from relevant government authorities.	• Any procurement approval of waivers from relevant authorities obtained What was availed were approval request letters.
Other documents not provided	• Further correspondence between the Solicitor General and the PS, National Treasury and Planning, on the charging of and assigning rights, title, interest

Condition Precedent	Documents not provided by the date the report was compiled
	and benefit in and to the GOK letter to Selenkei's and how eventually resolved.
Imenti Tea Factory Company Limited	
b) The seller has paid to KPLC the sum of Kenyan shillings two million, five hundred thousand (KShs. 2.5 million) in respect of installation, testing and commissioning of the 11kv circuit breaker.	• Evidence of payment in respect of installation, testing and commissioning of the 11kv circuit breaker
Chania Power Company Limited	
Other documents not availed for our review	• A revalidated PPA that was subsequently signed by Chania, KTDA Power and KPLC in 2017
Metumi Power Company Limited	
Other documents not availed for our review	• A revalidated PPA that was subsequently signed by Metumi, KTDA Power and KPLC in 2017

Appendix 3.4 Report 5: Beneficial Ownership and Contractors Used

Independent Power Producer (IPP)	Documents not provided by the date the report was compiled
Thika Power Limited	• Confirmation of the beneficial owners of Thika Power Limited (from the Office of the Attorney General) of British Virgin Islands based on the request of the Auditor General, Kenya.
Gulf Power Limited	• Confirmation of the beneficial owners of Gallant Power Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya.
Triumph Power Generating Company Limited	• Confirmation of the beneficial owners of Southern Intertrade Limited (from the Office of the Attorney General) of British Virgin Islands based on the request of the Auditor General, Kenya.
Regen- Terem SHPP Limited	• Confirmation of the beneficial owners of Idea Power Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya. • Confirmation of the beneficial owners of Vision Holdings Limited (from the Office of the Attorney General) of Channel Islands, United Kingdom based on the request of the Auditor General, Kenya.

Independent Power Producer (IPP)	Documents not provided by the date the report was compiled
	• Confirmation of the beneficial owners of North Gate Holdings Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya.
Lake Turkana Wind Power Limited	• Confirmation of the beneficial owners of Sandpiper Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya.
Cedate Limited	• Confirmation of the beneficial owners of Nursal Energy Limited (from the Office of the Attorney General) of Dubai, United Arab Emirates based on the request of the Auditor General, Kenya. • Confirmation of the beneficial owners of Dlrad Energy Limited (from the Office of the Attorney General) of Dubai, United Arab Emirates based on the request of the Auditor General, Kenya.
Selenkei Investment Limited	• Confirmation of the beneficial owners of Solray Energy Limited (from the Office of the Attorney General) of Dubai, United Arab Emirates based on the request of the Auditor General, Kenya. • Confirmation of the beneficial owners of Dlrad Energy Limited (from the Office of the Attorney General) of Dubai, United Arab Emirates based on the request of the Auditor General, Kenya.
Kipeto Energy PLC	• Confirmation of the beneficial owners of Okavango Kenya Mauritius Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya. • Confirmation of the beneficial owners of Craftskills Mauritius Limited (from the Office of the Attorney General) of Mauritius based on the request of the Auditor General, Kenya.

Appendix 3.5: Report 6: Operational Review

Section	Documents not provided by the date the report was compiled
1.2.5. Limitation of Scope	• Information on the nonfuel costs paid for energy procured in FY20 from Olkaria V (owned by KenGen) • Information on the nonfuel costs paid for energy procured in FY20 from Kipevu I (owned by KenGen)
1.1. Review of the price structures of the PPAs for IPPs	• The tariff modelling undertaken to determine the breakdown of charges between fixed and variable components for thermal and geothermal IPPs.
4.1.2.4 Solar PV – Invoice review for Strathmore University – May 2021	• PPA dated 22 November 2017 where the base CPI was set as 233.707
4.1.2.5 Small Hydro – Invoice review for Chania – May 2021	• PPA dated 25 May 2017 where the CPI was set as 244.733

Section	Documents not provided by the date the report was compiled
5.1. Performance assessment of Thermal Power Plants	• Gulf Power PPA dated 17 December 2012 – the availed version was incomplete and did not contain the schedules (1 to 11)
5.1.1.3. Fuel consumption values	• Gulf Power PPA schedule for fuel consumption
5.1.2.1. Contracted Capacity Geothermal IPP	• Documentation confirming approval of changes to the PPA or consideration by the Board on the amended contracted capacity of Orpower Plants 1, 2 and 3. • Evidence evidence of the grounds for increasing the contracted capacity and the process followed.
5.1.3.1. Test of Contracted Capacity at Signature Date (CCSD)	• Results for Full Commercial Operation Date (FCOD) test, together with the required certification of an independent engineer for all thermal plants, expect for Triumph Power and Gulf Power
6.1. Overview of the required fuel procurement Process	• Tender documents issued by Iberafrica to KPLC for review prior to tendering.This relates to the Fuel Supply Agreements (FSA) between : a) Iberafrica and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Gulf Energy limited dated 13 October 2015 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Rabai Power and: • Kenol Kobil dated 28 November 2008 • Kenol Kobil Limited dated 31 July 2015 c) Gulf Power Limited and Gulf Energy Limited dated 10 June 2014 d) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 March 2014 e) Thika Power Limited and: • Gulf Energy Limited dated 01 July 2013
	• HFO tendering process documentation for the FSAs between: a) Iberafrica Power Company Limited • Mobil Oil Kenya Limited dated 24 April 1998

Section	Documents not provided by the date the report was compiled
	• Gulf Energy Limited dated 18 May 2011 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Gulf Power Limited and Gulf Energy Limited dated 10 June 2014 c) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 March 2014
	• Evidence that KPLC reviewed the tender documents and reverted to the IPP within the stipulated time, of receipt of the documents with comments or no objection. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Gulf Energy Limited dated 13 October 2015 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Rabai Power Limited and: • Kenol Kobil dated 28 November 2008 • Kenol Kobil Limited dated 31 July 2015 c) Gulf Power Limited and Gulf Energy Limited dated 10 June 2014 d) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 March 2014 e) Thika Power Limited and Gulf Energy Limited dated 01 July 2013
	• A 7 day written notice given to KPLC by the IPP of the opening of the fuel supply tenders. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Rabai Power Limited and Kenol Kobil dated 28 November 2008 c) Gulf Power Limited and Gulf Energy Limited dated 10 June 2014 d) Triumph Power Generating Company Limited and:

Section	Documents not provided by the date the report was compiled
	• Gulf Energy Limited dated 04 March 2014 • Ramji Haribhai Devani Limited dated 09 October 2019 e) Thika Power Limited and Gulf Energy Limited dated 01 July 2013
	• Tender opening data and any other relevant information upon opening of the tenders that was shared with KPLC by the IPP. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Gulf Energy Limited dated 14 October 2019 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Rabai Power Limited and: • Kenol Kobil dated 28 November 2008 • Kenol Kobil Limited dated 31 July 2015 c) Gulf Power Limited and Gulf Energy Limited dated 10 June 2014 d) Triumph Power Generating Company Limited and: • Gulf Energy Limited dated 04 March 2014 • Ramji Haribhai Devani Limited dated 09 October 2019 e) Thika Power Limited • Gulf Energy Limited dated 01 July 2013 • Ramji Haribhai Devani Limited dated 31 July 2020
	• Detailed evaluation report shared with KPLC by the IPP. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Gulf Energy Limited dated 14 October 2019 • Ramji Haribhai Devani Limited dated 22 November 2021 b) Gulf Power Energy and:

Section	Documents not provided by the date the report was compiled
	• Gulf Energy Limited dated 10 June 2014 • Vivo Energy Kenya Limited dated 18 February 2021 c) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 March 2014 d) Thika Power Limited and Gulf Energy Limited
	• KPLC response to the evaluation. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Ramji Haribhai Devani Limited dated 22 Nov 2021 b) Rabai Power Limited and Kenol Kobil Limited dated 31 July 2015 c) Gulf Power Limited and Gulf Energy Limited dated 10 Jun 2014 d) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 Mar 2014 e) Thika Power Limited and Gulf Energy Limited dated 01 July 2013
	• Proposed FSA that was issued to KPLC by the IPP before entering into the fuel supply agreement. This relates to the FSAs between: a) Iberafrica Power Company Limited and: • Mobil Oil Kenya Limited dated 24 April 1998 • Gulf Energy Limited dated 18 May 2011 • Gulf Energy Limited dated 14 Oct 2019 • Ramji Haribhai Devani Limited dated 22 Nov 2021 b) Rabai Power Limited and: • Kenol Kobil dated 28 Nov 2008 • Kenol Kobil Limited dated 31 July 2015 c) Gulf Power Limited and Gulf Energy Limited dated 10 Jun 2014 d) Triumph Power Generating Company Limited and Gulf Energy Limited dated 04 Mar 2014 e) Thika Power Limited and:

Section		Documents not provided by the date the report was compiled
		• Gulf Energy Limited dated 01 July 2013 • Ramji Haribhai Devani Limited dated 31 July 2020
7.1.	Tariff review overview	• Rabai first amendment agreement dated 30 October 2015 • Gulf Power PPA version with applicable schedules containing the tariffs
8.1.	Project Timeline Overview	• The initial PPA between Rabai Power Limited and KPLC dated 01 February 2007 • The variation agreement to the initial Gulf Power Limited PPA dated 17 December 2012 • ERC and Board approvals for the amended and restated Strathmore PPA • Strathmore University amended and restated PPA • Regen-Terem SHPP Limited amended PPA dated 24 January 2014 • Chania Power Company Limited revalidated PPA • ERC and Board approvals for Chania Power Company Limited revalidated PPA • Metumi Power Company Limited revalidated PPA

Appendix 3.6: Report 7: IPP Financial Review

Review area	Documents not provided by the date the report was compiled
Financial models	• Auditors' certificate/confirmation of the audit of the Kipeto financial model
Value for money	• Value for money assessment / financial risk assessments done on all the PPAs. • Letters written by the National Treasury approving the PPAs for some FiT projects refer to a "Project Finance and Risk Assessment Report" submitted by the IPPs. These documents were requested but were not received when compiling this report. (See appendix 3.61 and 4.1 below) • Confirmation from the PPP Directorate that Value for Money (VFM) was confirmed at financial close for respective PPAs approved

Appendix 3.6.1: VFM and Financial Assessment request letter shared with the Auditor General for onward submission to National Treasury

Ref: xxx 24 May 2022

Mr Christopher Kirugua, OGW,
Director General, Public Private Partnerships Directorate,
The National Treasury,
Harambee Avenue, Treasury Building,
P. O Box 30007-00100,
Nairobi.

Dear Christopher,

RE: Value for Money and Financial Risk Assessments of Power Purchase Agreements Projects

Following the presidential directive through a special Gazette Notice No. 3076 published on 29 March 2021, Presidential Taskforce on Power Purchase Agreements (PPAs) Review (The Taskforce) was appointed to undertake a comprehensive review and analysis of all PPAs entered into between various Independent Power Producers (IPPs) and the Kenya Power and Lighting Company Limited Plc (KPLC). The Taskforce in its report gave nine (9) key recommendations, among them, the need for KPLC to undertake a forensic audit on procurement of PPAs with IPPs.

The Office of the Auditor General approved Deloitte & Touche LLP as the Auditors to undertake the forensic audit of the procurement of PPAs with IPPs on its behalf.

The Terms of Reference for the review require the Auditor to establish whether KPLC obtained value for money in the PPAs. We understand that National Treasury would approve projects under Public Private Partnerships (PPP) or give exemptions thereof. In addition, for the PPAs under FiT policy, the PPP Committee would approve the project's fiscal risks, contingent liabilities and confirm value for money, affordability, and risk transfer tests in accordance with section 61(3) of the PPP Act, 2013.

To enable the Auditor to fulfil the Terms of Reference mentioned above, we are requesting your esteemed office for:

a. Confirmation whether value for money and financial risk assessments were undertaken and value for money confirmed at financial close for the following PPAs scoped for review:
    1. Imenti Tea Factory Company Limited

2. Power Technology Solutions Limited
3. Regen-Terem SHPP Limited
4. Strathmore University
5. Cedate Limited
6. Hydro Project Service Peters Limited
7. Kipeto Energy Limited
8. Selenkei Investments Limited
9. Malindi Solar Group Limited
10. Biojule Limited
11. Gura Power Company Limited
12. Chania Power Company Limited
13. Metumi Power Company Limited
14. Iberafrica Power (EA) Limited
15. Orpower 4 Inc
16. Rabai Power Limited
17. Thika Power Limited
18. Gulf Power Limited
19. Triumph Power Generating Company Limited
20. Lake Turkana Wind Power Ltd

b. Provide the value for money and financial risk assessments documentation for the above PPAs, where applicable.

Your assistance in this matter is highly appreciated.

We look forward to hearing from you.

Yours Faithfully,

CPA, Nancy Gathungu, CBS

AUDITOR-GENERAL

Copy to:

1 Amb. Ukur Yatani, EGH
Cabinet Secretary
The National Treasury
Harambee Avenue, Treasury Building
P.O Box 30007-00100
Nairobi.

2 Dr. Monica Juma, EGH
Cabinet Secretary
Ministry of Energy
Kawi Complex, Off Red Cross Road
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Nairobi

3 Geoffrey Muli
Ag. Managing Director & Chief Executive Officer
Kenya Power and Lighting Company PLC
Stima Plaza, Kolobot Road, Parklands
P.O. Box 30099 – 00100
Nairobi.

4 Julie Nyang'aya
Partner, Risk Advisory
Deloittte & Touche LLP
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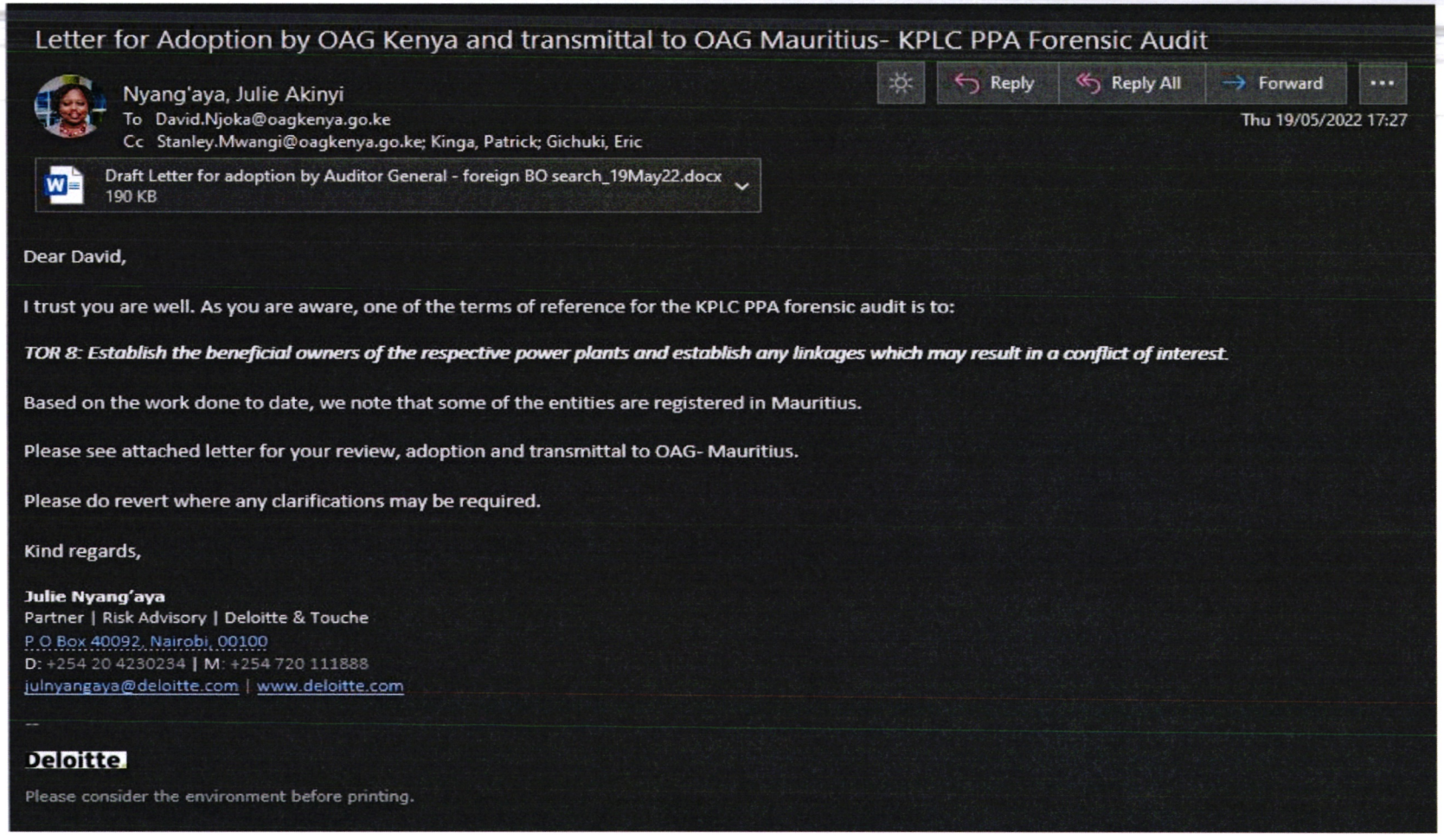

Letter for Adoption by OAG Kenya and transmittal to OAG Mauritius- KPLC PPA Forensic Audit

Nyang'aya, Julie Akinyi
To David.Njoka@oagkenya.go.ke
Cc Stanley.Mwangi@oagkenya.go.ke; Kinga, Patrick; Gichuki, Eric

Reply | Reply All | Forward | ...

Thu 19/05/2022 17:27

Draft Letter for adoption by Auditor General - foreign BO search_19May22.docx
190 KB

Dear David,

I trust you are well. As you are aware, one of the terms of reference for the KPLC PPA forensic audit is to:

TOR 8: Establish the beneficial owners of the respective power plants and establish any linkages which may result in a conflict of interest.

Based on the work done to date, we note that some of the entities are registered in Mauritius.

Please see attached letter for your review, adoption and transmittal to OAG- Mauritius.

Please do revert where any clarifications may be required.

Kind regards,

Julie Nyang'aya
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Appendix 4: List of persons interviewed.

Below is a list of Persons interviewed:

Name	Role
John Ihuthia	Ag. General Manager, Power Planning and Purchase Division
Paul Mwangi (Retired)	Former Ag. Network Management
Jude Ochieng	Ag. Company Secretary
Susan Ombuya	Manager, Energy Purchase, Business Strategy
Christopher Maloba	Manager, Network Division – National Control Centre
John Keru Mwangi	Senior Engineer, Energy Purchase, Business Strategy
Joswhite Ondabu Maragi	Engineer, Energy Purchase, Business Strategy
Fredrick Mutie Kitau	Engineer, Energy Purchase, Business Strategy
Ayub Kathurima	Chief Officer-Records Management & Corporate Heritage
Stanley Ngetich	Ag. Manager, Distribution, Network Division
Mary Njau	2nd Assistant Engineer, Network Division – National Control Centre

Note: In the 25 years to 30 June 2021 there were numerous changes of Accounting Officers at KPLC, Executive Management teams and staff that oversaw or participated in the procurement and other PPA activities. In addition, there were various board changes within KPLC and in the key stakeholders in the energy sector that interacted with KPLC on the procurement and approval of the PPAs. These include key government officials, representatives, and teams at Ministry of Energy (MOE), ERB/ERC/EPRA, Ministry of Finance/National Treasury, Attorney General and Solicitor General Offices to mention but a few.

Due to the 60-calendar days timeframe (17 April 2022 to 25 June 2022) within which this assignment was required to be executed, it was not possible to engage all stakeholders to obtain further insights beyond the information that was availed through KPLC, on their practical challenges and opportunities as they executed their varying roles regarding the procurement and award of the 20 PPAs in scope for this assignment. Information and documentation not received or reviewed at the time of compiling this report have not been incorporated into this version of the document.

Appendix 5: List of common addresses per BO Searches

IPP	Name	Description	Address	Address (BRS Letter)	Nationality	Shares
Power Technology Solutions Limited (Girika Small Hydro Power Station)	Francis Ngunjiri Maina	Director/ Shareholder	P.O Box 34305 G.P.O Nairobi	P.O Box 1208 - 00618	Kenya	Ordinary: 300 (38.7%)
	Elizabeth Nyawira Ngunjiri	Director/ Shareholder	P.O Box 34305 G.P.O Nairobi	P.O Box 1208 - 00618	Kenya	Ordinary: 200 (25.8%)
	Gururajan Seenuvasan	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 100 (12.9%)
	Lakshmipriya Gururajan	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 30 (3.9%)
	Cyrus Maina Kibira	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 30 (3.9%)
	James Kamira Karanjah	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 25 (3.2%)
	Benson Gichuki Nduguga	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 25 (3.2%)
	John Njoroge Kihanya	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 25 (3.2%)
	Esther Pauline Wahito	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 25 (3.2%)
	Peter Thairu Kenyanjui	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 5 (0.7%)
	Godfrey Njoroge Wanjihia	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 5 (0.7%)
	Stephen Micheni Linus	Director/ Shareholder	P.O Box 1208 Ruaraka	P.O Box 1208 - 00618	Kenya	Ordinary: 5 (0.7%)
Gulf Power Limited	Francis Koome Njogu	Director	P.O Box 61872 City Square	P.O Box 61872 - 00200	Kenya	N/A
	Ahmed Said S Bajaber	Director	P.O Box 61872 City Square	P.O Box 61872 - 00200	Kenya	N/A

IPP	Name	Description	Address	Address (BRS Letter)	Nationality	Shares
	Duncan King'ori Mukira	Director	P.O Box 61872 City Square	P.O Box 61872 - 00200	Kenya	N/A
Noora Power Ltd (shareholder of Gulf Power)	Suleiman Said Shahbal	Director/ Shareholder	P.O Box 51027 City Square	P.O Box 21754 - 00100	Kenya	Ordinary: 1 (50%)
	Francis Koome Njogu	Director/ Shareholder	P.O Box 51027 City Square	P.O Box 61872 - 00200	Kenya	Ordinary: 1 (50%)
Triumph Power Generating Company Limited	Triumph Group Limited	Shareholder	P.O Box 11640 Tom Mboya St	P.O Box 11640 - 00400	Kenya	Ordinary: 2,941,975 (100%) Preference: 2,557,955 (100%)
	Ahmed Rufa Abdirahman Haji Abass	Director/ Shareholder	P.O Box 90787 Mombasa G.P.O	P.O Box 11640 - 00400	Kenya	Ordinary: 10
	Mohammed Anwar Abdirahman Haji Abass	Director/ Shareholder	P.O Box 90787 Mombasa G.P.O	P.O Box 11640 - 00400	Kenya	Ordinary: 10
	Nihad Abdirahman Haji Abass	Director	P.O Box 11640 Tom Mboya St	P.O Box 11640 - 00400	Kenya	N/A
Triumph Group Limited (shareholder of Triumph Power Generating Company Limited)	Southern Intertrade Limited	Shareholder	P.O Box 78001-00507	P.O Box 78001-00507	British Virgin Islands	Ordinary: 806,200 (20%) Preference: 5,095,790 (20%)
	Interpel Investments Limited	Shareholder	P.O Box 78001 Viwandani	P.O Box 78001-00507	Kenya	Ordinary: 604,650 (15%) Preference: 3,821,840 (15%)
	Tecaflex Limited	Shareholder	P.O Box 78001-00400 Tom Mboya St	P.O Box 78001-00400	Kenya	Ordinary: 604,650 (15%) Preference: 3,821,840 (15%)
	Abdikhani Abdi Rahman Haji Abass	Director/ Shareholder	P.O Box 78001 Viwandani	P.O Box 78001-00507	Kenya	Ordinary: 201,550 (5%) Preference: 1,273,950 (5%)

IPP	Name	Description	Address	Address (BRS Letter)	Nationality	Shares
	Nihad Abdirahman Haji Abass	Director/ Shareholder	P.O Box 78001 Viwandani	P.O Box 78001-00507	Kenya	Ordinary: 201,545 (5%) Preference:1,273,955 (5%)
	Muhammad Ali Abdalla Loo	Secretary	P.O Box 11640 Tom Mboya St.	Not indicated	Kenya	N/A
Biojoule Limited	Umang Patel	Director/ Shareholder	P.O Box 32931 Ngara Road	P.O Box 32931 - 00600	Kenya	Ordinary: 225,500 (50%) Preference: 1,534,600 (50%)
	Bharatkumar Raojibhai Patel	Director/ Shareholder	P.O Box 32931 Ngara Road	P.O Box 32931 - 00600	Kenya	Ordinary: 225,500 (50%) Preference: 1,534,600 (50%)
	James Henry Marcus Cartwright	Director	P.O Box 32931 Ngara Road	P.O Box 32931 - 00600	United Kingdom	N/A
Idea Terem Hydro Power Limited - Regen-Terem SHPP Limited	Hafeez Amin Manji	Director	P.O Box 17592 Enterprise Road	P.O Box 17592 - 00500	Kenya	N/A
	Elka Kwamboka Motanya	Secretary	P.O Box 17592 Enterprise Road	P.O Box 17592 - 00500	Kenya	N/A
Gen Pro Power Systems (East Africa) Limited - Regen-Terem SHPP Limited	Estate of Joseph Simiyu Mukhamule	Shareholder	P.O Box 2134 Sarit Centre	P.O Box 2134 - 00606		Ordinary: 7000 (70%)
	Jimmy Nyongesa Sakhasia	Shareholder	P.O Box 213 Sarit Centre	P.O Box 213 - 00606		Ordinary: 1000 (10%)
	James Mburu Ng'ang'a	Director/ Shareholder	P.O Box 2134 Sarit Centre	P.O Box 2134 - 00606		Ordinary: 2000 (20%)
	Rosemary Natecho Simiyu	Director/ Shareholder	P.O Box 69986 Tom Mboya St	P.O Box 69986 - 00400		N/A
	Christopher Mukhamule Simiyu	Director	P.O Box 69986 Tom Mboya St	P.O Box 69986 - 00400		N/A

IPP	Name	Description	Address	Address (BRS Letter)	Nationality	Shares
Pall Mall Holdings - Regen-Terem SHPP Limited	Supaflo Flour Mills Limited	Shareholder	P.O Box 17592 Enterprise Road	Not included in BRS	Kenya	Ordinary: 500 (25%)
	Akiyda Two Thousand Limited	Shareholder	P.O Box 17592 Enterprise Road	Not included in BRS	Kenya	Ordinary: 500 (25%)
	Mini Bakeries (Nairobi) Limited	Shareholder	P.O Box 17592 Enterprise Road	Not included in BRS	Kenya	Ordinary: 500 (25%)
	Mini Bakeries (Mombasa) Limited	Shareholder	P.O Box 83797	Not included in BRS	Kenya	Ordinary: 500 (25%)
	Amin Akber Habib Manji	Director	P.O Box 17592 Enterprise Road	Not included in BRS	Kenya	N/A
	Hafeez Amin Manji	Director	P.O Box 17592 Enterprise Road	Not included in BRS	Kenya	N/A
	Shrirama Narasimha Phadke	Director	P.O Box 17592 Enterprise Road	Not included in BRS	N/A	N/A
Cedate Limited	Frontier Energy II Alpha K/S	Shareholder	P.O Box C/O Bech-Bruun Langeline Alle, 35,200 Copen Hagen 0	P.O Box 64544 - 00620	Denmark	Ordinary: 406,292 (42.4%)
	Frontier Energy II Beta K/S	Shareholder	P.O Box C/O Bech-Bruun Langeline Alle, 35,200 Copen Hagen 0	P.O Box 64544 - 00620	Denmark	Ordinary: 82,433 (8.6%)
	Nursal Energy Limited	Shareholder	P.O Box P O Box 82315, Dubai, United Arab Emirates	P.O Box 64544 - 00620	United Arab Emirates	Ordinary: 234,780 (24.5%)
	Dlrad Energy Limited	Shareholder	P.O Box C/O Horwath Mak Business Consulting P.O Box 82315 Dubai,UAE	P.O Box 64544 - 00620	United Arab Emirates	Ordinary: 234,780 (24.5%)
	Frontier Energy II Alpha K/S	Shareholder	P.O Box C/O Bech-Bruun Langeline Alle,	P.O Box 64544 - 00620	Denmark	Ordinary: 406,292 (42.4%)

IPP	Name	Description	Address	Address (BRS Letter)	Nationality	Shares
Selenkei Investment Limited			35,200 Copen Hagen 0			
	Frontier Energy II Beta K/S	Shareholder	P.O Box C/O Bech-Bruun Langeline Alle, 35,200 Copen Hagen 0	CVR No. 35445870 C/O Bech-Bruun, Langeline Alle 35,200 Copenhagen 0, Denmark	Denmark	Ordinary: 82,433 (8.6%)
	Solray Energy Limited	Shareholder	P.O Box C/O Horwath Mak Business Consulting P.O Box 82315 Dubai,UAE	C/O Horwath Mak Business Consulting P.O Box 82315 Dubai,UAE	United Arab Emirates	Ordinary: 278,299 (24.5%)
	Dlrad Energy Limited	Shareholder	P.O Box C/O Horwath Mak Business Consulting P.O Box 82315 Dubai,UAE	C/O Horwath Mak Business Consulting P.O Box 82315 Dubai,UAE	United Arab Emirates	Ordinary: 278,299 (24.5%)

Annexures

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	1.3.1.2	2D	OrPower – PP.1.1 – PPA dated 5 November 1998
	1.3.1.3	3L	Rabai – PP.1.1 - PPA dated 27th February 2007
	1.3.1.4	4M	LTWP – PP.1.1 – PPA dated 26 January 2010
	1.3.1.5	5K	Triumph – PP.1.1 – PPA dated 14 June 2012
	1.3.1.6	6K	Gulf – PP.1.1 - PPA dated 17th December 2012
	1.3.1.7	7K	Thika – PP.1.1 - PPA dated 2 July 2012
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	1.3.1.10	10F	Regen-Terem – PP.1.1 - PPA dated 28 January 2014
	1.3.1.11	11D	Biojoule - PP.1.1 – PPA dated 25th January 2016
	1.3.1.12	12H	Cedate – PP.1.1 - PPA dated 5th June 2017
	1.3.1.13	13F	HPSP – PP.1.1 - PPA dated 19 February 2018
	1.3.1.14	14K	Kipeto – PP.1.1 - PPA dated 17 June 2016
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	1.3.1.17	17E	Imenti – PP.1.1 - PPA dated 7 June 2010
	1.3.1.18	18F	Chania – PP.1.1 - PPA dated 27 October 2014
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	1.3.1.20	20F	Gura – PP.1.1 – PPA dated 1st March 2012
	1.3.1.21	9B	Circular to Directors No. 22.13 – Approval of PPA for the proposed 520KW Small Hydroelectric Power Plant on the Gikira River, Kianjoro, Nyeri County to be developed by Power Technology Solutions Limited. Dated 11th June 2013.

Section	Annexure No.	Folder No	Annexure Detail
	1.3.1.22	1E	Iberafrica – Lett.1.5 - MOE Letter to KPLC and copied to ERB dated 16 August 2004
	1.3.1.23	1E	Iberafrica – Lett.1.7 – MOE Letter to Iberafrica and Tsavo Power Ltd dated 22 March 2007
	1.3.1.24	2A	OrPower – 1.5 - Extract of Board minutes for the meeting held on 29 June 2012
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	1.3.1.26	4L	LTWP – Lett.1.1 – MOE letter to KPLC, dated 25 May 2009
	1.3.1.27	4C	Circular to Directors No 70.09 – 300MW Lake Turkana Wind Power Plant in Laisamis, dated 28 October 2009
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	1.3.1.38	5K	Triumph – PP.1.1 – PPA dated 14 June 2012
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	1.3.1.40	5A	Triumph – 1.4 - Extract of the resolutions of the Board of Directors of KPLC passed at the meeting held on 20th July 2012, dated 19th December 2012
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Section	Annexure No.	Folder No	Annexure Detail
	1.3.1.42	5A	Triumph – 1.5 - Extract of the resolutions of the Board of Directors of the KPLC passed at the meeting held on 18th December 2012, dated 19th December 2012
	1.3.1.43	5E	Triumph – 1.2 – ERC approval of the Variation Agreement, dated 19th December 2012
	1.3.1.44	5K	Triumph – PP.1.2 – Variation Agreement dated 31st December 2012
	1.3.1.45	X	The Solicitor General's view on charging of and assigning all present and future rights, titles, interests, and benefits in and to the GOK letter of support to IPPs lenders
	1.3.1.46	4A	LTWP – 1.4 - BM.88.09 – Extract of the minutes of the Board meeting held on 04 November 2009
	1.3.1.47	4A	LTWP – 1.10 - Extract of Board resolutions passed at the meeting held on 7 May 2013
	1.3.1.48	4A	LTWP – 1.16 - Extract of Board resolutions passed at the meeting held on 30 July 2014
	1.3.1.49	4A	LTWP – 1.19 - Extract of Board resolutions passed at the meeting held on 03 August 2017
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	1.3.1.51	X	Dated 25th August 2016, Extract of the resolution of KPLC Board of Directors passed at the meeting held on 9th December 2014 – Approval of the PPA between KPLC and Biojoule Limited.
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	1.3.1.56	1A	Iberafrica – 1.4 – BM.88.07 - Extract of Board minutes of a special meeting held on 24 August 2007
	1.3.1.57	1A	Iberafrica – 1.6 – BM.20.08(b) - Extract of Board minutes for the special Board meeting held on 14 March 2008
	1.3.1.58	2A	OrPower – 1.1 – Minutes of the special Board meeting held on 21 January 2009
	1.3.1.59	2C	OrPower – 1.3 - ERC Approval of the PPA submitted to the Commission on 29th September 2014, dated 30 October 2014
	1.3.1.60	2A	OrPower – 1.7 – Minutes of the Board of Directors meeting held on 07 September 2016
	[illegible]	[illegible]	[illegible].1 – Minutes of the Special Board meeting held on 3rd August 2007
	[illegible]	[illegible]	[illegible].3 – Minutes of the special meeting of the Board held on 24th September 2007

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	1.3.1.63	3A	Rabai – 1.6 - Minutes of the Board meeting held on 10 November 2010
	1.3.1.64	3A	Rabai – 1.7 - Minutes of the Board meeting held on 16 March 2016
	1.3.1.65	4A	LTWP – 1.2 – BM.12.09 – Minutes of the Special Board meeting held on 21 January 2009
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	1.3.1.70	15A	Malindi – 1.1 - BM.29.16 – Extract of the minutes of the Board meeting held on 16 March 2016
	1.3.1.71	15A	Malindi – 1.2 - BM.80.18 – Extract of minutes of the Board meeting held on 29 May 2018
	1.3.1.72	18A	Chania, Metumi & Gura – 1.1 – BM.27.17 – Extract of minutes of the Board meeting held on 26 January 2017
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	1.3.1.74	2B	Circular to Directors No 5527 – Olkaria III IPP development (PPA and Security Arrangement), dated 2 November 1998
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	1.3.1.78	1A	Iberafrica – 1.4 – BM.88.07 - Extract of Board minutes of a special meeting held on 24 August 2007
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	1.3.2.2	1L	Iberafrica - PP.6.75.5 - Invitation to tender
	1.3.2.3	2B	Circular to Directors No 5435 – Olkaria III Independent Power Purchase Agreement, dated 12 March 1998
	1.3.2.4	3B	Circular to Directors No 60.06 – Summary of the evaluation report for the proposed Rabai 80-90 MW Power Generating Plant, dated 21st September 2006

Section	Annexure No.	Folder No	Annexure Detail
	1.3.2.5	6P	Gulf – Technical & Financial evaluation report dated 24 December 2009
	1.3.2.6	5L	Triumph – Technical & Financial Evaluation Report dated 24 December 2009
	1.3.2.7	13E	HPSP – Lett.1.1 – MOEP letter to KPLC and copied to ERC dated 4 January 2016
	1.3.2.8	13G	HPSP – Dated 26th April 2019, PPP approval of the PPA dated 19th February 2018 between Hydro Project Service Peters Limited and KPLC – 510kW Hydro Power Project
Section 1.3.4: Conditions Precedent in PPAs	1.3.4.1	8E	Strathmore – PP.1.1 – PPA dated 15th October 2015
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	1.3.5.2	26B	Selenkei – CR 12 Copies of Selenkei Investments Limited
	1.3.5.3	26C	Rabai – CR 12 Copies of Rabai Power Limited
	1.3.5.4	26D	LTWP – CR 12 Copies of Lake Turkana Wind Power Limited
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	1.3.5.6	26F	Thika – CR 12 Copies of Thika Power Limited
Section 1.3.6.1: Operational review of the IPPs – PPA Price Structures	1.3.6.1	1G	Iberafrica – PP.1.1 - PPA dated 16 August 1996
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	1.3.6.3	3L	Rabai – PP.1.1 - PPA dated 27th February 2007
	1.3.6.4	4M	LTWP – PP.1.1 – PPA dated 26 January 2010
	1.3.6.5	5K	Triumph – PP.1.1 – PPA dated 14 June 2012
	1.3.6.6	6K	Gulf – PP.1.1 - PPA dated 17th December 2012
	1.3.6.7	7K	Thika – PP.1.1 - PPA dated 2 July 2012
	1.3.6.8	8E	Strathmore – PP.1.1 – PPA dated 15th October 2015
	1.3.6.9	9E	PTSL - PP.1.1 – PPA, dated 12th June 2013
	1.3.6.10	10F	Regen-Terem – PP.1.1 - PPA dated 28 January 2014
	1.3.6.11	11D	Biojoule - PP.1.1 – PPA dated 25th January 2016
	1.3.6.12	12H	Cedate – PP.1.1 - PPA dated 5th June 2017
	1.3.6.13	13F	HPSP – PP.1.1 - PPA dated 19 February 2018

Section	Annexure No.	Folder No	Annexure Detail
	1.3.6.14	14K	Kipeto – PP.1.1 - PPA dated 17 June 2016
	1.3.6.15	15H	Malindi – PP.1.1 - PPA dated 05 June 2017
	1.3.6.16	16I	Selenkei – PP.1.1 – PPA dated 05 June 2017
	1.3.6.17	17E	Imenti – PP.1.1 - PPA dated 7 June 2010
	1.3.6.18	18F	Chania – PP.1.1 - PPA dated 27 October 2014
	1.3.6.19	19F	Metumi – PP.1.1 – PPA dated 27 October 2014
	1.3.6.20	20F	Gura – PP.1.1 – PPA dated 1st March 2012
Section 1.3.6.2: Operational review of the IPPs – Energy Procurement	1.3.6.21	22J	Energy Purchased 2016 - 2017 - June 2017
	1.3.6.22	22J	Energy Purchased 2017 - 2018 - June 2018
	1.3.6.23	22J	Energy Purchased 2018 - 2019
	1.3.6.24	22J	Energy Purchased 2019 - 2020 - June 2020
	1.3.6.25	22J	Energy Purchased 2020 - 2021 - June 2021
	1.3.6.26	21I	Power Purchase 2016 - 2017 Workings
	1.3.6.27	21I	Power Purchase 2017 - 2018 Workings
	1.3.6.28	21I	Power Purchase 2018 - 2019 Workings
	1.3.6.29	21I	Power Purchase 2019 -2020 Workings
	1.3.6.30	21I	Power Purchase 2020 -2021 Workings
	1.3.6.31	22E	KPLC financial statements for the year ended 30 June 2021
	1.3.6.32	X	KP/3C.1/QMS/OP/05 - ISO 9001:2008 QMS: Energy Purchase: SUBJECT: Bulk Energy Invoice Verification
	1.3.6.33	22C	Rabai - May 2021 Invoices and Supporting documentation
	1.3.6.34	22B.4	Rabai - CCT.05 - Contracted Capacity Test dated 08.01.2020,08.01.2021
			T.06 - Contracted Capacity Test dated 01.03.2021
	1.3.6.36	22C	OrPower 4 - May 2021 Invoices
	1.3.6.37	22C	LTWP – May 2021 Invoices
	1.3.6.38	22C	Strathmore – May 2021 Invoices

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	1.3.6.39	22C	Chania – May 2021 Invoices
	1.3.6.40	22A	Harmonized CPI (HCPI) From January 2006 to April 2022
	1.3.6.41	22A	US Consumer Price Index January 1913 – April 2022
	1.3.6.42	22C	Biojoule – May 2021 Invoices
	1.3.6.43	22B.6	Triumph - CCT.03 - Contracted Capacity Test dated 19.07.2019
	1.3.6.44	22B.6	Triumph - CCT.04 - Contracted Capacity Test for Unit 8 dated 09.07.2020
	1.3.6.45	22B.6	Triumph - CCT.05 - Contracted Capacity Test dated 04.05.2021
	1.3.6.46	X	Rabai - CCT.04 - Contracted Capacity Test dated 19.07.2020
	1.3.6.47	X	Rabai letter to KPLC dated 12 May 2020 where Rabai shared with KPLC the detailed tender evaluation report (For the FSA between Rabai and Dalbit Petroleum Limited dated 10 July 2020)
	1.3.6.48	3K	Rabai – Lett.1.3 – KPLC letter to Rabai Power Limited dated 05 June 2020
	1.3.6.49	3K	Rabai – Lett.1.4 – Rabai Power Limited letter to KPLC dated 10 June 2020
	1.3.6.50	X	FSA between Iberafrica Power Company Limited and Gulf Energy Limited dated 13 October 2015
	1.3.6.51	3H.1	FSA between Rabai and Dalbit Petroleum Limited, dated 10 July 2020
	1.3.6.52	6R.1	FSA between Gulf Power and Vivo Energy Kenya Limited, dated 18 February 2021
	1.3.6.53	X	KPLC letter to Gulf dated 17 March 2021 where it indicated that Gulf Power did not submit the proposed FSA to KPLC for comments prior to signing which was contrary to the fuel procurement procedures
Section 1.3.8: Other observations	1.3.8.1	21A	Demand Risk – Lett.1.1 - KPLC letter to ERC and copied to MOE dated 8 October 2018
	1.3.8.2	23A	Gazette Notice No. 3076 dated 29 March 2021
3.1: Applicable Laws and Regulations			
Section 3.1.6: Compliance with	3.1.6.1	1L	Iberafrica - PP.6.75.5 - Invitation to tender
			- Tender Opening Minutes dated 30 April 1996
			- Memo dated 4 March 1996
	3.1.6.4	1F	Iberafrica - Fax to MEP dated 11 March 1996
	3.1.6.5	1F	Iberafrica - Letter of award to MEP dated 30 April 1996

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	3.1.6.6	1H	Iberafrica – Evaluation Report dated June 1996
	3.1.6.7	2B	Circular to Directors No 5435 – Olkaria III Independent Power Purchase Agreement, dated 12 March 1998
	3.1.6.8	2B	Circular to Directors No 5527 – Olkaria III IPP development (PPA and Security Arrangement), dated 2 November 1998
	3.1.6.9	4C	Circular to Directors No 30.11 – Renegotiation of the PPA for the proposed 300MW Wind Power Plant at Loyangalani, Marsabit County to be developed by Lake Turkana Wind Power Limited, dated 27 July 2011
	3.1.6.10	4A	LTWP – 1.1 - Extract of minutes of the Special Board Meeting held on 20 January 2009
	3.1.6.11	4C	Circular to Directors No 71.09 – PPA for the proposed 300 MW Wind Energy by Lake Turkana Wind Power, dated 03 November 2009
	3.1.6.12	4L	LTWP – Lett.1.1 – MOE letter to KPLC, dated 25 May 2009
	3.1.6.13	4L	LTWP – Lett.1.2 – MOE letter to KPLC and copied to Treasury and ERC, dated 3 June 2009
Section 3.1.7: Competitive tendering between 2005 and 2009	3.1.7.1	X	Rabai – Evidence of the setting up of the tender evaluation committee
	3.1.7.2	X	Triumph - Evidence of the setting up of the tender evaluation committee
	3.1.7.3	X	Gulf - Evidence of the setting up of the tender evaluation committee
	3.1.7.4	X	Thika - Evidence of the setting up of the tender evaluation committee
	3.1.7.5	X	Triumph – Evidence of tender advertisement
	3.1.7.6	6R.2	Gulf – FSA Lett.1.1 - KPLC Letter to Gulf Energy dated 20 July 2020
	3.1.7.7	X	Thika - Evidence of tender advertisement
	3.1.7.8	3M	Rabai - RFP dated 5 June 2006
	3.1.7.9	3M	Rabai - Tender opening minutes dated 8 September 2006
	3.1.7.10	5M	Triumph - Tender Opening Minutes dated 15 December 2009
			nder Opening Minutes dated 15 December 2009
			ender Opening Minutes dated 15 December 2009
	3.1.7.13	3M	Rabai - RFP dated 5 June 2006
	3.1.7.14	6O	Gulf - Intent to Award Letter dated 6th January 2010

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	3.1.7.15	3L	Rabai – PP.1.2 - Addendum No. 1 dated 29 October 2007
	3.1.7.16	3L	Rabai – PP.1.3 - Amended and restated PPA dated 4 September 2008
	3.1.7.17	3L	Rabai – PP.1.4 - Amendment deed dated 3 October 2016
	3.1.7.18	5K	Triumph – PP.1.2 – Variation Agreement dated 31st December 2012
	3.1.7.19	3A	Rabai – 1.3 – Minutes of the special meeting of the Board held on 24th September 2007
	3.1.7.20	3A	Rabai – 1.5 – Minutes of the special Board meeting held on 8 August 2008
	3.1.7.21	3A	Rabai – 1.7 - Minutes of the Board meeting held on 16 March 2016
	3.1.7.22	5A	Triumph – 1.4 - Extract of the resolutions of the Board of Directors of KPLC passed at the meeting held on 20th July 2012, dated 19th December 2012
	3.1.7.23	6A	Gulf – 1.4 - BM.38.13 – Extract of the minutes of the Board meeting held on 2nd August 2013
	3.1.7.24	24A	Deloitte letter to OAG for adoption and transmittal to MOE
Section 3.1.8: Procurement under PPD(PPP) Regulations, 2009 model between 30 March 2009 to 8 February 2013	3.1.8.1	17B	Circular to Directors No 57.09 – Proposed Terem Falls and Imenti Tea Factory Small Hydro Power Plants Under Feed – In - Tariff
	3.1.8.2	9D	PTSL – Lett.1.1 – MOE letter to Gikira Energy dated 27th August 2018
	3.1.8.3	10E	Regen-Terem – Lett.1.1 - MOE letter to Genpro Power Systems (EA) Limited and copied to KPLC and ERC, dated 18th February 2013
	3.1.8.4	14I	Kipeto – Lett.1.1 – MOE letter to KPLC and copied to ERC and Kipeto Energy Limited, dated 4th June 2012
	3.1.8.5	5L	Triumph – Technical & Financial Evaluation Report dated 24 December 2009
	3.1.8.6	5A	Triumph – 1.1 – Extract of the minutes of the IPP Committee meeting held on 29 December 2009
	3.1.8.7	9A	PTSL - 1.1 - BM.30.13 – PPA for the proposed 520KW Small Hydroelectric Power Plant on the Gikira River, Kianjoro, Nyeri County to be developed by Power Technology Solutions Limited, dated 12th June 2013.
	3.1.8.8	10A	Regen-Terem – 1.1 – BM.66.09 – Extract of Board Minutes for the meeting held on 26th June 2009
	3.1.8.9	17A	Imenti – 1.1 – BM.66.09 – Extract of Board Minutes for the meeting held on 26th June 2009
	3.1.8.10	14A	Kipeto – 1.1 - Extract of the minutes of the Board meeting held on 9 December 2014, dated 07 November 2018

Section	Annexure No.	Folder No	Annexure Detail
Section 3.1.9: Procurement under PPP Act, 2013 between 2013 and 2015	3.1.9.1	12E	Cedate – 1.1 - GOK Letter of Support for the 40MW Solar Power Project by Cedate Limited, dated 4th August 2017.
	3.1.9.2	15F	Malindi – 1.1 - GOK letter of support dated 01 November 2017
	3.1.9.3	16F	Selenkei – 1.1 - GOK Letter of Support, dated 4th August 2017
	3.1.9.4	12F	Cedate – Lett.1.1 - MOEP letter to KPLC and copied to Cedate Limited and ERC, dated 3rd July 2015
	3.1.9.5	15G	Malindi – Lett.1.1 – MOEP letter to KPLC and copied to ERC and Vateki International Holdings Ltd, dated 11 December 2014
	3.1.9.6	16H	Selenkei – Lett.1.1 – MOEP letter to KPLC and copied to ERC and Selenkei Investments Limited, dated 3 July 2015
	3.1.9.7	X	Strathmore – MOEP Approval
	3.1.9.8	X	HPSPL – MOEP Approval
	3.1.9.9	X	Biojoule – MOEP Approval
	3.1.9.10	12J	Cedate - Feasibility Studies
	3.1.9.11	12I	Cedate – Dated 26th April 2019, PPP approval of the PPA dated 5th June 2017 – 40MW Solar Power Project by Cedate Limited
	3.1.9.12	15I	Malindi – Dated 26th April 2019, PPP approval of the PPA dated 5th June 2017 – 40 MW Solar Power Project by Malindi Solar Group
	3.1.9.13	16K	Selenkei - Feasibility Studies
	3.1.9.14	16J	Selenkei – Dated 26 April 2019, PPP approval of the PPA dated 5th June 2017 - 40MW Solar Power Project by Selenkei Investments Limited
	3.1.9.15	20H	Gura - Feasibility Studies
	3.1.9.16	18H	Chania - Feasibility Studies
	3.1.9.17	8F	Strathmore - Feasibility Studies
	[illegible]	[illegible]	[illegible] asibility Studies
	[illegible]	[illegible]	[illegible] ated 26th April 2019, PPP approval of the PPA dated 19th February 2018 between Hydro Project Service Peters Limited and KPLC – 510kW Hydro Power Project
	3.1.11.1	1E	Iberafrica – Lett.1.7 – MOE Letter to Iberafrica and Tsavo Power Ltd dated 22 March 2007

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
Section 3.1.11: Roles played by Stakeholders	3.1.11.2	1E	Iberafrica – Lett.1.5 - MOE Letter to KPLC and copied to ERB dated 16 August 2004
	3.1.11.3	2A	OrPower – 1.5 - Extract of Board minutes for the meeting held on 29 June 2012
	3.1.11.4	2B	Circular to Directors No 23.14 – Proposed expansion of Olkaria III Geothermal Power Project up to 150 MW by OrPower 4 Inc., dated 03 September 2014
	3.1.11.5	4L	LTWP – Lett.1.1 – MOE letter to KPLC, dated 25 May 2009
	3.1.11.6	4C	Circular to Directors No 70.09 – 300MW Lake Turkana Wind Power Plant in Laisamis, dated 28 October 2009
	3.1.11.7	4C	Circular to Directors No 27.12 – PPA for 300 MW Lake Turkana Wind Power Limited, dated 12 July 2012
	3.1.11.8	14I	Kipeto – Lett.1.2 – MOE letter to KPLC and copied to Kipeto, dated 5 October 2020
	3.1.11.9	18E	Chania, Metumi & Gura - MOEP letter to KPLC and ERC dated 13 December 2016
Section 3.1.12: Governance and oversight over PPAs	3.1.12.1	23A	Gazette Notice No. 10723 dated 8 October 2021
	3.1.12.2	1A	Iberafrica – 1.4 – BM.88.07 - Extract of Board minutes of a special meeting held on 24 August 2007
	3.1.12.3	1A	Iberafrica – 1.6 – BM.20.08(b) - Extract of Board minutes for the special Board meeting held on 14 March 2008
	3.1.12.4	2A	OrPower – 1.1 – Minutes of the special Board meeting held on 21 January 2009
	3.1.12.5	2A	OrPower – 1.7 – Minutes of the Board of Directors meeting held on 07 September 2016
	3.1.12.6.	3A	Rabai – 1.1 – Minutes of the Special Board meeting held on 3rd August 2007
	3.1.12.7	3A	Rabai – 1.3 – Minutes of the special meeting of the Board held on 24th September 2007
	3.1.12.8	3A	Rabai – 1.6 - Minutes of the Board meeting held on 10 November 2010
	3.1.12.9	4A	LTWP – 1.2 – BM.12.09 – Minutes of the Special Board meeting held on 21 January 2009
	3.1.12.10	4A	LTWP – 1.17 – Extract of the minutes of the Board meeting held on 26 January 2017
	3.1.12.11	4A	LTWP – 1.18 - BM.107.17 – Extract of the Minutes of the Board meeting held on 03 August 2017
	3.1.12.12	8A	Strathmore – 1.2 - BM.109.17 – New PPA for Strathmore University 0.25 MW Solar Power Purchase Agreement, for the meeting held on 3rd August 2017
	3.1.12.13	10A	Regen-Terem – 1.1 – BM.66.09 – Extract of Board Minutes for the meeting held on 26th June 2009
	3.1.12.14	12A	Cedate – 1.1 - BM.33.16 – Extract of the minutes of the Board meeting held on 16th March 2016

Section	Annexure No.	Folder No	Annexure Detail
	3.1.12.15	15A	Malindi – 1.1 - BM.29.16 – Extract of the minutes of the Board meeting held on 16 March 2016
	3.1.12.16	15A	Malindi – 1.2 - BM.80.18 – Extract of minutes of the Board meeting held on 29 May 2018
	3.1.12.17	18A	Chania, Metumi & Gura – 1.1 – BM.27.17 – Extract of minutes of the Board meeting held on 26 January 2017
	3.1.12.18	4A	LTWP – 1.10 - Extract of Board resolutions passed at the meeting held on 7 May 2013
	3.1.12.19	4A	LTWP – 1.11 - Extract of the minutes of the Board meeting held on 29 November 2013
	3.1.12.20	4A	LTWP – 1.15 - BM.63.14 – Extract of the minutes of the Board meeting held on 30 July 2014
	3.1.12.21	13A	HPSP – 1.1 – Extract of the minutes of the Board meeting held on 20 July 2017, dated 22 February 2019
	3.1.12.22	14A	Kipeto – 1.1 - Extract of the minutes of the Board meeting held on 9 December 2014, dated 07 November 2018
	3.1.12.23	16A	Selenkei – 1.1 - Extract of the minutes of the Board meeting held on 16th March 2016, dated 22nd February 2019
	3.1.12.24	16B	Circular to Directors No. 13.19 – Issuance of Board Resolutions for PPAs, dated 21st January 2019.
Section 3.1.12.2: Governance and oversight over PPAs - Instances where the KPLC Board ratified PPAs that had already been executed.	3.1.12.26	7B	Circular to Directors No.20.10 – RFP for 60-80 MW Heavy Fuel Oil Fired Power Plant at Thika, dated 16 April 2010
Section 3.1.12.3: Governance and oversight over PPAs - Instances where the PPAs were approved by ERC before KPLC Board Approval	3.1.12.27	1D	Iberafrica – 1.2 - ERC Approval of the initialled amended and restated PPA dated 21 December 2007
	3.1.12.28	1A	Iberafrica – 1.7 – BM.45.08 – Extract of Board minutes for a special Board meeting held on 12 June 2008
	3.1.12.29	5E	Triumph – 1.1 – ERC approval of the PPA, dated 7 June 2012 and ERC letter to KPLC and Triumph, dated 11 June 2012
	3.1.12.30	6E	Gulf – 1.1 - ERC approval of the PPA, dated 7th June 2012 and ERC letter to KPLC and Gulf Power, dated 11th June 2012
	3.1.12.31	6A	Gulf – 1.3 - BM.75.12 – Extract of the minutes of the Board meeting held on 26th November 2012
	3.1.12.32	4F	LTWP – 1.3 - ERC approval of the 3rd Amended and Restated PPA, dated 6 May 2013

Section	Annexure No.	Folder No	Annexure Detail
	3.1.12.33	4A	LTWP – 1.9 – BM.21.13 – Extract of the minutes of the Board meeting held on 07 May 2013
	3.1.12.34	9C	PTSL – 1.1 - ERC Approval of Energy Purchase Agreement for the Gikira, Kianjoro Small Hydro Power Plant, dated 6th December 2012.
Section 3.1.12.4: Governance and oversight over PPAs - KPLC Board overrules concerns raised by various stakeholders	3.1.12.35	4A	LTWP – 1.4 - BM.88.09 – Extract of the minutes of the Board meeting held on 04 November 2009
	3.1.12.36	4C	Circular to Directors No 14.13 – 300 MW LTWP PPA, dated 24 April 2013
	3.1.12.37	13B	Circular to Directors No 69.17 – PPA for 510kW Hydro Power Plant by HPSP Limited, dated 19 July 2017
	3.1.12.38	1A	Iberafrica – 1.5 – BM.90.07 - Extract of Board minutes for the meeting held on 28 August 2007
	3.1.12.39	1A	Iberafrica – 1.8 – BM.97.08 – Extract of Board minutes for the meeting held on 11 November 2008
Section 3.1.12.7: Governance and oversight over PPAs – Other governance exceptions	3.1.12.40	9B	Circular to Directors No. 22.13 – Approval of PPA for the proposed 520KW Small Hydroelectric Power Plant on the Gikira River, Kianjoro, Nyeri County to be developed by Power Technology Solutions Limited. Dated 11th June 2013.
	3.1.12.41	11A	Circular to Directors No. 24.19 – Issuance of Board Resolutions for PPAs dated 15th February 2018
	3.1.12.42	11C	Biojoule – 1.1 - ERC approval of the PPA in respect of Biojoule Kenya Ltd Biogas Power Plant, dated 3rd December 2015
3.2: IPP Selection Criteria, Events Chronology and Summary of Procurement Findings			
Section 3.2: IPP Selection Criteria, Events Chronology and Summary of Procurement Findings	3.2.1	3B	Circular to Directors No 60.06 – Summary of the evaluation report for the proposed Rabai 80-90 MW Power Generating Plant, dated 21st September 2006
	3.2.2	6P	Gulf – Technical & Financial evaluation report dated 24 December 2009
	3.2.3	1D	Iberafrica – 1.4 - ERC Approval of pass-through Costs dated 12 August 2009
	3.2.4	2B	Circular to Directors No 48.16 – Proposed reconfiguration of Olkaria III Geothermal Power Project by OrPower 4 Inc., dated 06 September 2016
	3.2.5	4C	Circular to Directors No 76.17 – LTWP Limited 300 MW 2nd Variation Agreement to the PPA, 03 August 2017
	3.2.6	5B	Circular to Directors No 17.11 – Triumph Generating Company Limited PPA for the development of 83MW Thermal Power Plant at Athi River, dated 25th March 2011
	3.2.7	15B	Circular to Directors No 18.16 – PPA for 40MW Solar Power Plant by Vateki International Holdings Limited, 8dated 09 March 2016

Section	Annexure No.	Folder No	Annexure Detail
	3.2.8	7B	Circular to Directors No.19.11 – Melec Powergen Inc PPA for the development of 87MW Thermal Power Plant at Thika, dated 25 March 2011
	3.2.9	2B	Circular to Directors No 65.06 – Olkaria III Geothermal Power Project by OrPower 4, dated 22 September 2006
	3.2.10	14C	Circular to Directors No 155.20 – A brief on the outstanding matters on the 100MW Kipeto Energy Plc Wind Power Project and the possible KPLC default under the PPA, dated 14 December 2020
	3.2.11	18B	Circular to Directors No 14.17 – New PPAs for seven KTDA Power Plants located in different counties across the country, dated 24 January 2017
	3.2.12	12F	Cedate– Lett.1.9 – OAG letter to National Treasury and copied to MOE and KPLC, dated 17th July 2019
	3.2.13	12F	Cedate – Lett.1.6 – MOEP letter to KPLC and copied to ERC dated 4 January 2016
	3.2.14	13E	HPSP – Lett.1.2 – KPLC letter to PPPs National Treasury and copied to MOE, dated 29 November 2018
	3.2.15	21A	Demand Risk – Lett.1.2 – KPLC letter to ERC and copied to MOE and KPLC Board Chair dated 8 November 2018
	3.2.16	21A	Demand Risk – Lett.1.3 – ERC letter to KPLC and copied to MOE dated 15 November 2018
	3.2.17	21A	Demand Risk – Lett.1.4 – KPLC letter to ERC and copied to MOE and Chief of Staff & Head of Delivery, Office of the President dated 21 December 2018
	3.2.18	21A	Demand Risk – Lett.1.5 – ERC letter to KPLC Board Chair and copied to MOE and KPLC MD&CEO dated 24 November 2018
	3.2.19	21A	Demand Risk – Lett.1.6 – KPLC letter to ERC and copied to MOE dated 04 March 2019
	3.2.20	12B	Circular to Directors No 34.18 - Deed of variation of the PPA dated 5th June 2017 for Cedate Limited, dated 23rd April 2018
	3.2.21	12A	Cedate – 1.2 - Minutes of the Board meeting held on 29th May 2018
	3.2.22	16B	Circular to Directors No 43.18 – approval of the Deed of Variation of the PPA dated 5th June 2017 for Selenkei Investment Limited, dated 23 May 2018
	3.2.23	8B	Circular to Directors No.78.17 – New PPA for Strathmore University 0.25MW Solar PPA, dated 3rd August 2017
	3.2.24	14F	Kipeto – 1.1 – ERC Conditional Approval of the PPA - Letter to KPLC and Kipeto Energy Limited dated 17 March 2015

Section	Annexure No.	Folder No	Annexure Detail
	3.2.25	14F	Kipeto – 1.2 - ERC Approval dated 04 March 2015 and ERC letter to KPLC and Kipeto Energy Limited dated 8 June 2018
3.4: Beneficial Ownership and Contractors and Subcontractors Used			
Section 3.4.1: Beneficial Owners - IPPS with common Shareholding	3.4.1.1	26A	Cedate – CR 12 Copies of Cedate Limited
	3.4.1.2	26B	Selenkei – CR 12 Copies of Selenkei Investments Limited
	3.4.1.3	26C	Rabai – CR 12 Copies of Rabai Power Limited
	3.4.1.4	26D	LTWP – CR 12 Copies of Lake Turkana Wind Power Limited
	3.4.1.5	26E	Iberafrica – CR 12 Copies of Iberafrica Power (EA) Limited
	3.4.1.6	26F	Thika – CR 12 Copies of Thika Power Limited
	3.4.1.7	26G	Gulf – CR 12 Copies of Gulf Power Limited
	3.4.1.8	1C	Iberafrica – Lic.1 - Electric Power Production Licence issued on 20 July 2005
	3.4.1.9	1C	Iberafrica – Lic.2 - Generating Licence dated 23 June 2008
	3.4.1.10	2F	Orpower - Electric Power Generation Licence dated 16 July 2015
	3.4.1.11	3D	Rabai – Lic.1 - Generating licence dated 30 May 2008
	3.4.1.12	4E	LTWP - Electric Power Generation Licence dated 16 December 2010
	3.4.1.13	6D	Triumph - Electric Power Generation Licence dated 14 September 2011
	3.4.1.14	6D	Gulf - Electric Power Generation Licence dated 14 September 2011
	3.4.1.15	7D	Thika - Electric Power Generation Licence dated 09 February 2012
	3.4.1.16	8C	Strathmore - Electric Power Generation Permit dated 26 April 2017
	3.4.1.17	10C	Regen-Terem - Electric Power Generation Licence dated 27 February 2014
	3.4.1.18	11B	Biojoule - Electric Power Generation, Distribution and Supply Permit dated 03 December 2015
	3.4.1.19	12C	Cedate - Electric Power Generation Licence dated 03 March 2017
	3.4.1.20	13C	HPSP - Electric Power Generation Permit dated 12 April 2018
	3.4.1.21	14E	Kipeto - Electric Power Generation Licence issued on 16 September 2015
	3.4.1.22	15D	Malindi - Electric Power Generation Licence dated 26 July 2017
	3.4.1.23	16D	Selenkei - Electric Power Generation Licence dated 03 March 2017

Section	Annexure No.	Folder No	Annexure Detail
	3.4.1.24	17C	Imenti - Electric Power Generation and Distribution Permit dated 29 April 2010
	3.4.1.25	18C	Chania - Electric Power Generation Permit dated 30 March 2016
	3.4.1.26	19C	Metumi - Electric Power Generation and Distribution Licence dated 30 March 2016
	3.4.1.27	20C	Gura - Electric Power Generation and Distribution Licence dated 28 June 2017
3.5. Operational review of the IPPs			
Section 3.5.2: Operational review of the IPPS - Energy procurement	3.5.2.1	22E	KPLC financial statements for the year ended 30 June 2021
	3.5.2.2	22E	KPLC financial statements for the year ended 30 June 2020
	3.5.2.3	22E	KPLC financial statements for the year ended 30 June 2019
	3.5.2.4	22E	KPLC financial statements for the year ended 30 June 2018
	3.5.2.5	22E	KPLC financial statements for the year ended 30 June 2017
Section 3.5.3: Operational review of the IPPS - Invoice and Payment Process	3.5.3.1	2D	OrPower – PP.1.4 - Third Amended and Restated PPA dated 26 November 2014
	3.5.3.2	2D	OrPower – PP.1.5 - Second amendment of the third amended and restated PPA ("Second amendment agreement") dated 20 December 2016
	3.5.3.3	22K	FCOD for OrPower, plant 4
	3.5.3.4	4M	LTWP – PP.1.4 - Amended and Restated PPA, dated 13 May 2013
Section 3.5.4: Operational review of the IPPS – Performance Assessments	3.5.4.1	22H	Plant Availability Data
	3.5.4.2	22K	Full Commercial Operation Dates For IPPS - 26 May 2022
	3.5.4.3	22L	Net Electric Output per Plant 2017-2021
Section 3.5.5: Operational review of the IPPS – HFO Procurement	3.5.5.1	1G	Iberafrica – PP.1.6 - Amended and Restated PPA dated 24 December 2007
	3.5.5.2	X	Rabai letter to KPLC dated 12 May 2020 where Rabai shared with KPLC the detailed tender evaluation report (For the FSA between Rabai and Dalbit Petroleum Limited dated 10 July 2020)
			ett.1.3 – KPLC letter to Rabai Power Limited dated 05 June 2020
			ett.1.4 – Rabai Power Limited letter to KPLC dated 10 June 2020
	3.5.5.5	X	FSA between Iberafrica Power Company Limited and Gulf Energy Limited dated 13 October 2015

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	3.5.5.6	X	Iberafrica letter to KPLC dated 16 June 2015 where Iberafrica informed KPLC that the tender opening date would be 19 June 2015 (For the FSA Between Iberafrica and Gulf Energy Limited, dated 13 Oct 2015)
	3.5.5.7	3H.1	FSA between Rabai and Dalbit Petroleum Limited, dated 10 July 2020
	3.5.5.8	X	Rabai Power letter to KPLC dated 20 April 2020 where Rabai informed KPLC that the tender opening date would be 24 April 2020
	3.5.5.9	6R.1	FSA between Gulf Power and Vivo Energy Kenya Limited, dated 18 February 2021
	3.5.5.10	X	KPLC letter to Gulf dated 17 March 2021 where it indicated that Gulf Power did not submit the proposed FSA to KPLC for comments prior to signing which was contrary to the fuel procurement procedures
Section 3.5.6: Operational review of the IPPS – Tariff Review	3.5.6.1	25A	Feed-In-Tariff Policy December 2012 version
Section 3.5.7: Timelines Review	3.5.7.1	1G	Iberafrica – PP.1.7 - First supplemental agreement to the amended and restated PPA dated 11 November 2010
	3.5.7.2	1A	Iberafrica – 1.12 – BM.91.09 – Extract of the minutes for the Board meeting held on 04 November 2009
	3.5.7.3	1D	Iberafrica – 1.5 - ERC Approval of the First Supplemental Agreement to the Amended and Restated PPA dated 28 October 2010
	3.5.7.4	2C	OrPower – 1.5 - ERC approval of the Second Amendment of the Third Amended and Restated PPA in respect of OrPower 4 Inc Power Plants, dated 1st December 2016
	3.5.7.5	3L	Rabai – PP.1.4 - Amendment deed dated 3 October 2016
	3.5.7.6	4M	LTWP – PP.1.5 - PPA Variation Agreement dated 31 July 2014
	3.5.7.7	4M	LTWP – PP.1.6 - Second Variation Agreement dated 19 September 2017
	3.5.7.8	4M	LTWP – 1.4 - ERC approval of the second variation agreement, dated 06 September 2017
	3.5.7.9	5K	Triumph – PP.1.2 – Variation Agreement dated 31st December 2012
	3.5.7.10	5A	Triumph – 1.5 - Extract of the resolutions of the Board of Directors of the KPLC passed at the meeting held on 18th December 2012, dated 19th December 2012
	3.5.7.11	5E	Triumph – 1.2 – ERC approval of the Variation Agreement, dated 19th December 2012

X – Document availed for review - to be traced and submitted upon request

Section	Annexure No.	Folder No	Annexure Detail
	3.5.7.12	8D	Strathmore – 1.2 – ERC approval of the amendments in respect of the PPA dated 15th October 2015 made between Strathmore University and KPLC, dated 6th September 2017
	3.5.7.13	18D	Chania – 1.2 - ERC Approval of the PPA between Chania Power Company Limited and KPLC, dated 26th April 2017
	3.5.7.14	15H	Malindi – PP.1.2 - Deed of Variation dated 6 November 2018
	3.5.7.15	X	Cedate – PP.1.2 – Deed of Variation dated 05 July 2018
	3.5.7.16	16I	Selenkei – PP.1.2 - Deed of Variation dated 05 July 2018
	3.5.7.17	20F	Gura – PP.1.2 – PPA dated 25 May 2017
	3.5.7.18	20D	Gura – 1.2 - ERC Approval of the PPA between Gura Power Company Limited and KPLC, dated 26th April 2017
	3.5.7.19	19.D	Metumi – 1.2 - ERC approval of the PPA between Metumi Power Company Limited and KPLC, dated 26th April 2017
3.6: Financial Review of the IPPs			
Section 3.6: Financial Review of the IPPS	3.6.1.1	14G	Kipeto - Financial Model
	3.6.3.1		Letter dated 18 September 2015, where the Secretary to the PPP Committee at National Treasury, Engineer Stanley K. Kamau issued guidance to MoE, and subsequently to KPLC on the approval process of projects under the Fit Policy.

X – Document availed for review - to be traced and submitted upon request

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