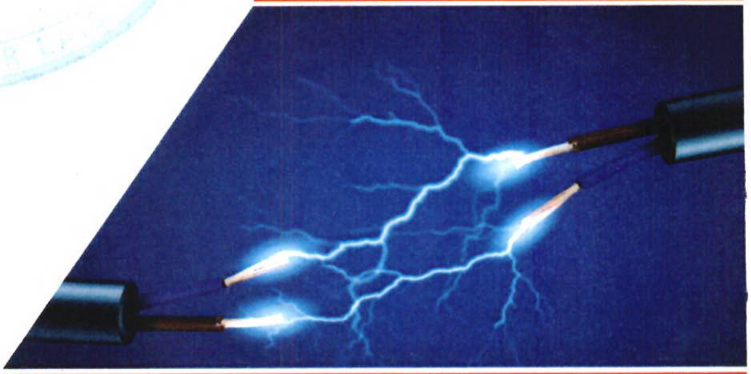
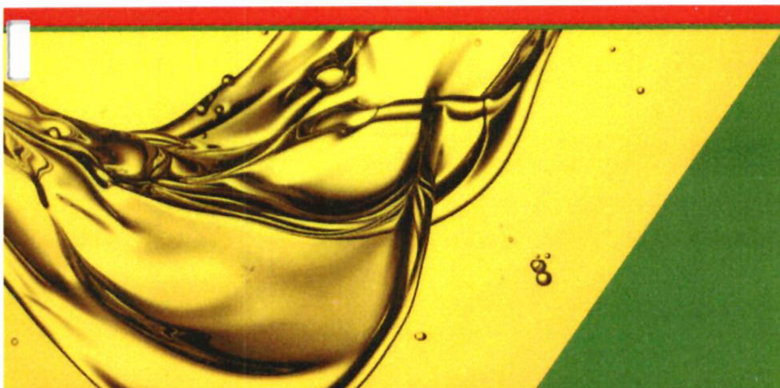
Paper Laid
By Hon. A. Duale (LoM) on 16.04.2015

REPUBLIC OF KENYA

MINISTRY OF ENERGY AND PETROLEUM



POWERING KENYA
EMPOWERING DREAMS



PERFORMANCE REPORT

For Presentation to Parliament as per Provisions of Article 153(4)(B) of The Constitution of Kenya

July 2014 - December 2014

Vol. 8

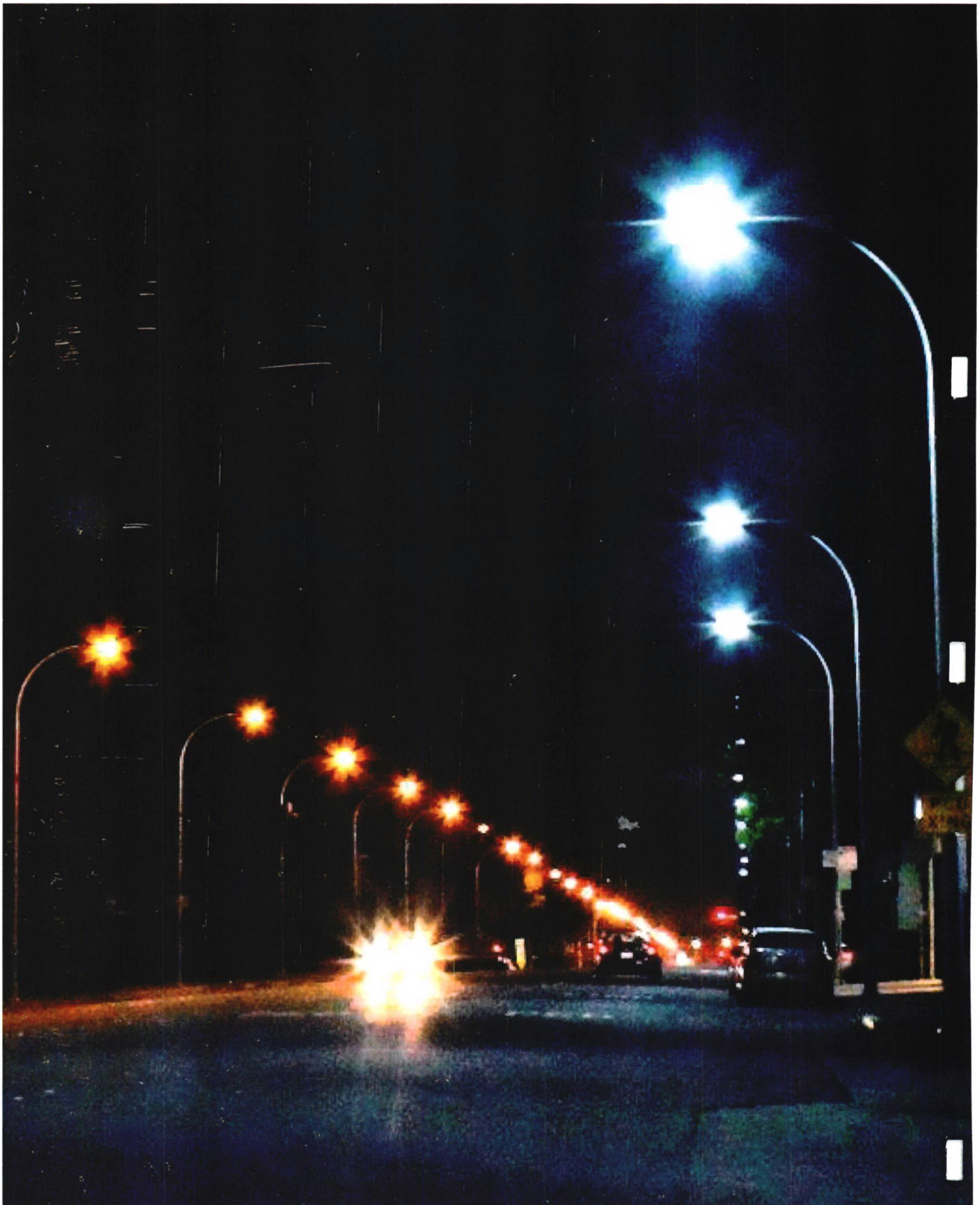


TABLE OF CONTENTS

REMARKS BY THE CABINET SECRETARY MINISTRY OF ENERGY AND PETROLEUM

Mr. Davis Chirchir

The energy and petroleum sector witnessed remarkable strides in the second half of the year 2014, as the government accelerated the 5,000MW power generation plan to boost generation and connectivity. This gained impetus even against the backdrop of discovery of significant quantities in oil and gas within the East and Central African Region.

Several major sector projects were completed during the period while others were at advanced stages of completion. These include power generation, transmission and distribution initiatives aimed at enhancing access to electricity and reducing the cost of energy.

Most notably, one of the sector's flagship projects, the 280MW Olkaria geothermal power project, by the Kenya Electricity Generating Company (KenGen) was completed during the period. HE President Uhuru Kenyatta officially commissioned the 140MW Olkaria IV plant in October. The Olkaria I additional units 4 and 5 project, with a generation capacity of 140MW was completed in early December and is now feeding the national grid.

Increased geothermal power generation is already bearing positive impact on the national economy by reducing the cost of electricity for businesses and households. Specifically, this saw a reduction in fuel cost charges by 60 per cent, from Ksh7.22 per kWh in July to Ksh2.53 per kWh in January, a development attributable to displacement of diesel by geothermal in the national power generation portfolio. Further in a strategic move to enable early commercialisation of drilled wells, KenGen intensified generation from their innovative wellhead technology. To date, more than 22.8MW of electricity has been added to the grid from the mobile wellheads.

The Ngong Wind Power project by KenGen was inaugurated as part of the company's Green Energy strategy targeting renewable sources of electricity. In a move to further utilise the wind resource, KenGen is currently undertaking feasibility/design studies on another wind projects Meru targeting up to 400MW of electricity.

On the other hand, the Geothermal Development Company (GDC) also registered considerable strides with the Menengai and the Baringo-Silali geothermal projects.

Energy has been singled out as one of the key enablers of the Vision 2030. Energy security therefore remains a matter of national priority.

Over the period under review, we launched a robust campaign dubbed 'Plan for Power' aimed at assessing the current and prospective power demand particularly the major consumers. This initiative will inform all our plans in the energy sub-sector moving forward starting from generation, transmission and supply of electricity.

At the same time, the Government made new grounds towards realising the 24-hour economy in major cities in Kenya. Already, the project has kicked off in Nairobi with lighting up of the streets of the capital city and this is expected to roll out in other major urban centres in the country.

Further and in line with the Government's agenda, we have stepped up the rural electrification initiative targeting to connect all primary schools with electricity. The Rural Electrification Authority (REA) has made commendable progress on this and we will ensure that this goal is achieved within the set timelines.

At the same time, the developments in Oil and Gas industry are expected to provide a major stimulus to the local economies and will require extensive capital investment in new infrastructure and upgrading of the existing infrastructure.
Still on the petroleum industry, the National Oil Corporation of Kenya (NOCK) continued to increase upstream and downstream activities. During the period under review, NOCK upgraded the National Data Center to a web-based system, embarked on building a seismic processing centre and completed feasibility studies on the geothermal and petro physical laboratory. These initiatives are aimed at enhancing the country capacity for onshore and offshore petroleum exploration following the recent discovery of substantial petroleum reserves in Northern Kenya.

To further enhance capacity in the nascent oil and gas sector, NOCK has partnered with Strathmore College to roll out professional courses targeting senior and middle level executives and managers in the public and private sectors.

On the downstream side, NOCK completed and commenced operations of the new 130 metric-tonne Nairobi National Terminal Liquefied Petroleum Gas Storage and filling plant to be commissioned in January 2015.

On policy formulation, the Energy Bill which seeks to repeal the Energy Act No. 12 of 2006 and the Geothermal Resources Act No. 12 of 1982 of the Laws of Kenya is now at an advanced stage. If enacted into law, this bill aims to consolidate the laws relating to the energy sub-sector, align the legal and regulatory framework of the sector with the Constitution of Kenya, and also provide for National and County Government functions in relation to energy.

Another significant bill also at the same stage is the petroleum exploration, development and production bill, 2014 which seeks to provide a framework for the contracting, exploration, development and production of petroleum. The Bill also seeks to provide a framework for the safe cessation of upstream petroleum operations. The Bill proposes to repeal the Petroleum (Exploration and Production) Chapter 308 of the Laws of Kenya. The Bill further seeks to give effect to the relevant articles of the Constitution of Kenya, 2010 in so far as they apply to upstream petroleum operations.

We are optimistic that parliament will pass these bills soon to further help solidify our plans and operations in energy and petroleum particularly in light of the prevailing devolved structure and also provide a subtle guideline to inter-county relations on energy and oil resources exploitation.

We look forward to an exciting year as the energy sector strives to live up to its mandate of providing clean, accessible and affordable energy to all Kenyans in line with the Vision 2030.

Hon. Davis Chirchir
Cabinet Secretary, Energy and Petroleum

REPORT FOR THE MINISTRY OF ENERGY AND PETROLEUM BY ENG. JOSEPH NJOROGE, MBS, PRINCIPAL SECRETARY FOR ENERGY AND PETROLEUM

Eng. Joseph Njoroge, MBS

It is my honour and privilege to present to you the quarter two report for the financial year 2014-2015 from the Ministry of Energy and Petroleum. This report covers status and progress of various projects in the energy and petroleum sub-sectors.

The past one year has seen us move great strides in both energy and petroleum inching closer to our targets as a ministry and also as the Government of Kenya. As you are aware this quarter was the last by which time we are expected to have attained the eight Millennium Development Goals (MDG) under the umbrella of the United Nations, the first of which was to eradicate extreme poverty and hunger. To this end, we played our role and continue to reduce the cost of power in the country consequently driving down the cost of doing business in the country, results of which we expect to trickle down to all Kenyans.

The recent developments in oil exploration and gas industry are expected to provide a major incentive to the local economies but given their capital intensity there is need for more concerted effort in fundraising to ensure that Kenyans reap the most from the new found resources.

Several projects in power generation, transmission and distribution aimed at enhancing access to electricity and reducing the cost of energy were concluded in the quarter.

Perhaps one of the biggest gains in the period under review was the rural electrification campaign aimed at connecting all primary schools with electricity as a gateway to the rural areas. This also goes hand-in-hand with delivery of the government's commitment to providing laptop computers to class one pupils in a strategic move to improve the standards of education.

To this end, the Rural Electrification Authority (REA) embarked on connecting 21,228 primary schools in Kenya with electricity from the national grid and solar sources. During the period, 3,486 schools were connected to solar and 1,625 to the national grid. Another 1,850 are expected to be connected in January 2015.
Another ground-breaking project in the quarter was the successful delivery of one of the sector's flagship projects - the 280MW Olkaria geothermal power project, by the Kenya Electricity Generating Company (KenGen). HE President Uhuru Kenyatta officially commissioned the 140MW Olkaria IV plant in October 2014. The Olkaria I additional units 4 and 5 project, with a generation capacity of

> We played our role and continue to reduce the cost of power in the country consequently driving down the cost of doing business

140MW was completed in early December and is now feeding the national grid.

Still on the electricity generation front, the Geothermal Development Company (GDC) also recorded considerable strides with the Menengai 460MW geothermal project and the Baringo-Silali 200MW project. GDC concluded Power Purchase Agreements with Kenya Power in October 2014. It also signed a USD 100 million facility with KfW to finance infrastructure and drilling projects.

Similarly the Kenya Electricity Transmission Company (KETRACO) continued to deliver several power transmission improvement projects. Notable among these included the 482 kilometre 220/400kV Mombasa-Nairobi line expected to be complete in May 2015, and the 100 kilometre 400kV Suswa-Isinya, Nairobi Ring.

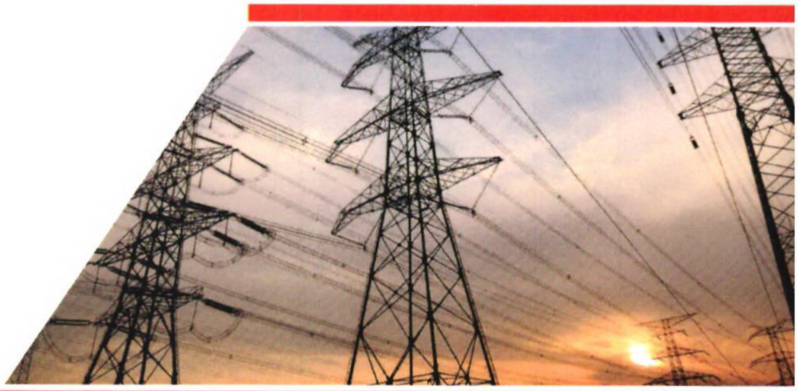
On the distribution side, Kenya Power continued to implement the Kenya Energy Expansion Project (KEEP) which involves expanding and upgrading the electricity distribution network with a view to enhancing system efficiency. KEEP entails construction of 53 new primary distribution sub-stations and associated feeder lines and three new transmission lines.

During the period July-December 2014, Kenya Power completed 1,126 kilometres of new high and medium voltage power lines against a target of 1,600 kilometres. The national power distributor also completed five new sub-stations during the period.

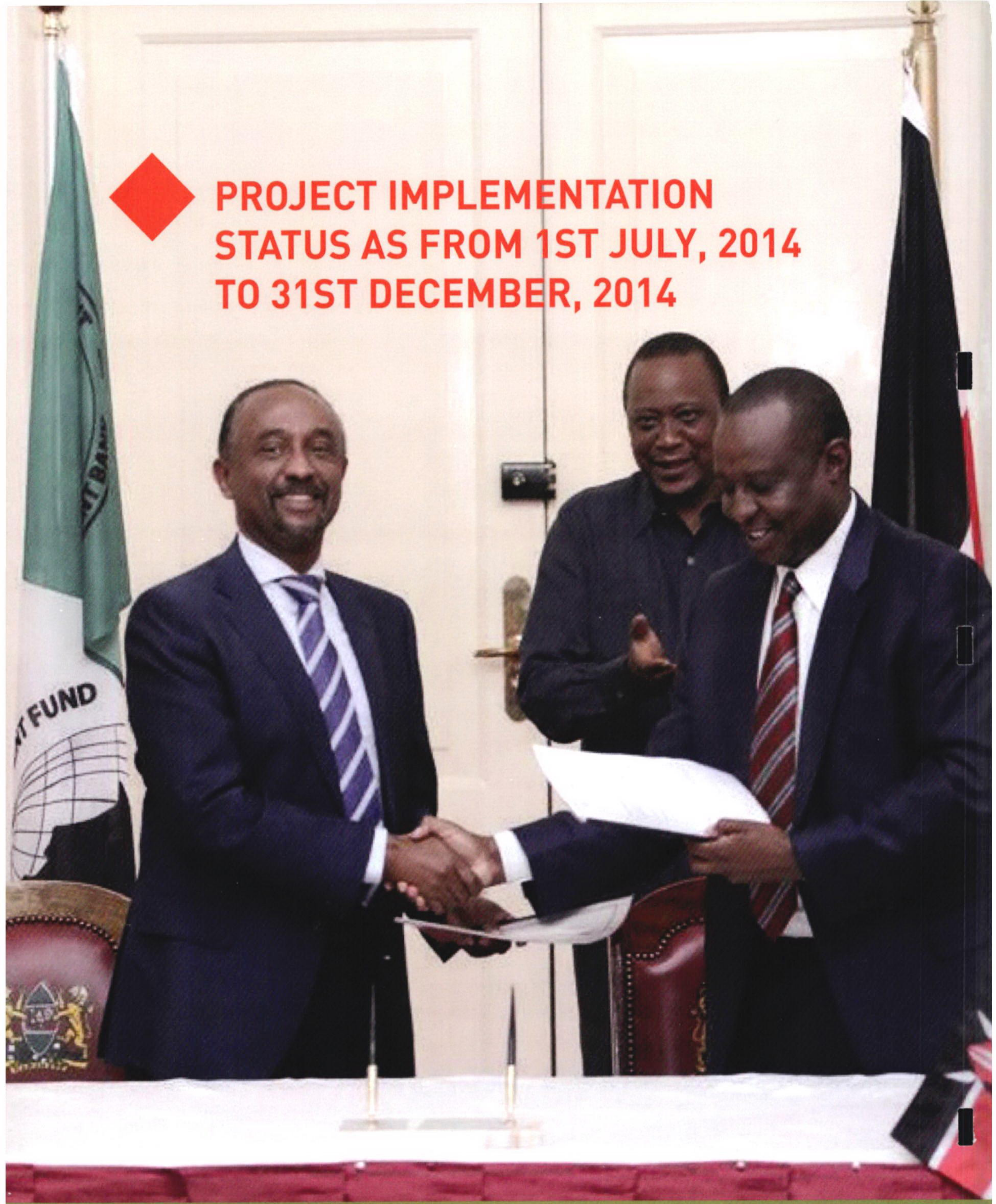
In the period under review, the regulator concluded nine Power Purchase Agreements totalling 46MW including a 30MW power export to Rwanda. The Energy Regulatory Commission (ERC) also completed the draft 20-year Power Master Plan under the Least Cost Power Development Plan. To promote the 24-hour economy concept in Nairobi and other counties, ERC approved a special street lighting tariff of Ksh4.36 per kWh operational between 6pm and 6am.

This year 2015 is widely viewed as a very exciting year by stakeholders and actuaries alike and being vision 2030 second Medium-Term Plans (MTP) 2012 - 2017 the stage is set for one of the most momentous years of our time.
I Wish you a prosperous New Year 2015.

Eng. Joseph Njoroge, MBS,
Principal Secretary for Energy and Petroleum



PROJECT IMPLEMENTATION STATUS AS FROM 1ST JULY, 2014 TO 31ST DECEMBER, 2014



MINISTRY OF ENERGY AND PETROLEUM

PROJECT IMPLEMENTATION STATUS AS FROM 1ST JULY, 2014 TO 31ST DECEMBER, 2014

S/No	Project Name	Implementation Status	Benefits to Kenyans
ELECTRICAL POWER DEVELOPMENT DIRECTORATE			
1.	Increase Electricity availability through power generation (5000+MW Programme)	310.72 MW of new power generation capacity comprised of i. 140 MW Olkaria I Unit 4&5 Geothermal Plant. ii. 70 MW Olkaria IV Unit 2 geothermal Plant. iii. 20.4 MW Ngong' Phase II Wind power Plant. iv. 80.32 MW Athi River 2 Gulf MSD thermal plants were completed.	• Reliable power supply to customers; • Reduced electricity tariffs due to inclusion of cheaper power mix; • employment opportunities and income generation; • Environmental sustainability through displacement of biomass and fossil fuel by cleaner and environmentally friendly alternatives.
2.	Expanding and upgrading electricity Transmission	Mobilized resources for the construction of the following lines: i. 23.3Km stringing of Olkaria-Suswa Transmission line. ii. 186Km stringing of Mombasa-Nairobi (Lot I-Rabai -Tsavo River) Transmission line. iii. 128Km stringing of Mombasa-Nairobi (Lot 2-Tsavo River-Isinya) Transmission line. iv. 32Km stringing of Nanyuki -Meru-Isiolo Transmission line.	• Improve power reliability; • Reduce system losses; • Improve electricity access; • Creates employment opportunities.
3.	Expand and upgrade electricity distribution network	Through Kenya Power a total of 1,108Km of power distribution lines across the country were completed.	• Improve power reliability and reduce system losses; • Enhance access to electricity.
4.	Electricity Connection to public institutions	A total of 1,706 primary schools were connected with electricity during the period under review. As at December 2014, electrification of primary schools was as follows: a) Electrified 17,278 b) Under construction/ installation 3,880 with 3,061 on grid extension that will be completed by 30th April 2015 and 819 on solar PVs that will be completed by 31st March 2015 The Ministry is on course of meeting this target.	• Improve access of electricity; • Improve learning conditions in schools.

S/No	Project Name	Implementation Status	Benefits to Kenyans
5.	700MW LNG Power Plant at Dongo Kundu	Project was put on hold following the discovery of natural gas in Wajir County and offshore Lamu Basin. The gas discoveries are currently being appraised to determine the amount of gas available.	
PETROLEUM DIRECTORATE			
6.	Feasibility studies and Front End Engineering Design for construction of crude oil pipeline from Lokichar to Lamu	a) The contract for the feasibility studies and Front End Engineering Design was awarded to Toyota-Tshusho on 13th November, 2014. b) The consultant has submitted an inception report which has been approved by the steering committee of the project.	• Enable construction of the crude oil pipeline; • Creates employment opportunities.
7.	Complete development of National Petroleum Master Plan	PricewaterhouseCoopers (PwC Consortium) was contracted by the Ministry and is in the process of finalizing the final report which will be ready in May, 2015.	• Provide a road map for investment in processing, pipelines, storage and distribution; • Evaluate domestic, regional and global export markets for oil and gas.
8.	Monitoring, Supervising and Reporting on Seismic Data Acquisition carried out by Petroleum Exploration Companies	a) Monitored and reported on the progress of the ongoing 2D seismic data acquisition on onshore Block 11A. b) 2D seismic data acquisition is ongoing in Blocks L1B, L16 operated by Camac Energy c) 3D seismic acquisition is ongoing in offshore blocks L21, L22, L23 and L24 operated by Total E& P and ENI Holdings. d) Analysis and interpretation of already acquired data is ongoing.	• Increased accessibility in remote areas through road construction; • Improved lifestyles through CSR projects e.g. construction of schools, health facilities, dams and boreholes; • Creates employment opportunities when contracted during exploration; • Business opportunities for supply of goods and services to contractors.
9.	Monitor, supervise and report on the results of drilling oil exploration wells	Monitored, supervised and reported on the results of exploratory and appraisal drilling activities as indicated below: **i. Sala -2 well** Sala -2 well was drilled to a Total Vertical Depth (TVD) of 2,606m. Significant occurrences of oil and gases were encountered in different horizons with the final result expected after analysis. **ii. Amosing -2 and Amosing –2A Wells** Amosing -2 was an appraisal well that discovered 30m of net oil pay thickness and gas. Amosing -2a was a directional well drilled at the location of Amosing -2 well, to a depth of 2,878m (TMD). 90m of net oil pay thickness was discovered. **iii. Etuko -2 Well** Etuko -2 well was drilled in September 2014. This was an appraisal well. The well was abandoned at 650m since it encountered water with oil shows.	• Increased accessibility in remote areas through road construction; • Improved lifestyles through CSR projects e.g. construction of schools, health facilities, dams and boreholes; • Business opportunities for supply of goods and services to contractors; • Capacity and skill development e.g. on the job training • Scholarship opportunities. • More wells will confirm the amount of recoverable crude oil.

S/No	Project Name	Implementation Status	Benefits to Kenyans
		iv. Etom -1 well Etom –1 well was drilled to a depth of 2,000m (TVD). This was an exploration well and discovered 10m of net pay oil thickness. Well testing for the completed wells is in progress to establish the commerciality of the hydrocarbons discovered. **v. Kodos -1 well** The Kodos -1 well was a wildcat exploration well drilled in Block 10BB in the Kerio Basin, northeast of the successful South Lokichar Basin. Hydrocarbon shows were encountered in the well, thus indicating the presence of an active petroleum system. **vi. Ekosowan -1** The Ekosowan -1 well was an exploration well drilled in Block 10BB to a final depth of 2,029m. The well had oil shows. **vii. Ngamia -4 well** Ngamia -4 well was an exploration well in Block 10BB drilled to a final depth of 1,814m and successfully encountered up to 120m f net hydrocarbon pay, of which up to 80m s was oil. **viii. Twiga -2A well tests** Four flow tests were conducted on Twiga -2A well in Block 13T, achieving production rates between 150 and 3,270 bopd (barrels of oil produced per day) under natural flow with no depletion, the highest oil production rate seen to date in Kenya.	
10.	Delineation of New Petroleum Exploration Blocks	Additional Fourteen (14) Petroleum Exploration Blocks were delineated from the current Forty Six (46) to Sixty (60). Engaged the Survey of Kenya to publish the revised Kenya Exploration Block Map. Upon publication, the Ministry will initiate the gazetting process.	• Creates investment opportunities • Creates employment opportunities

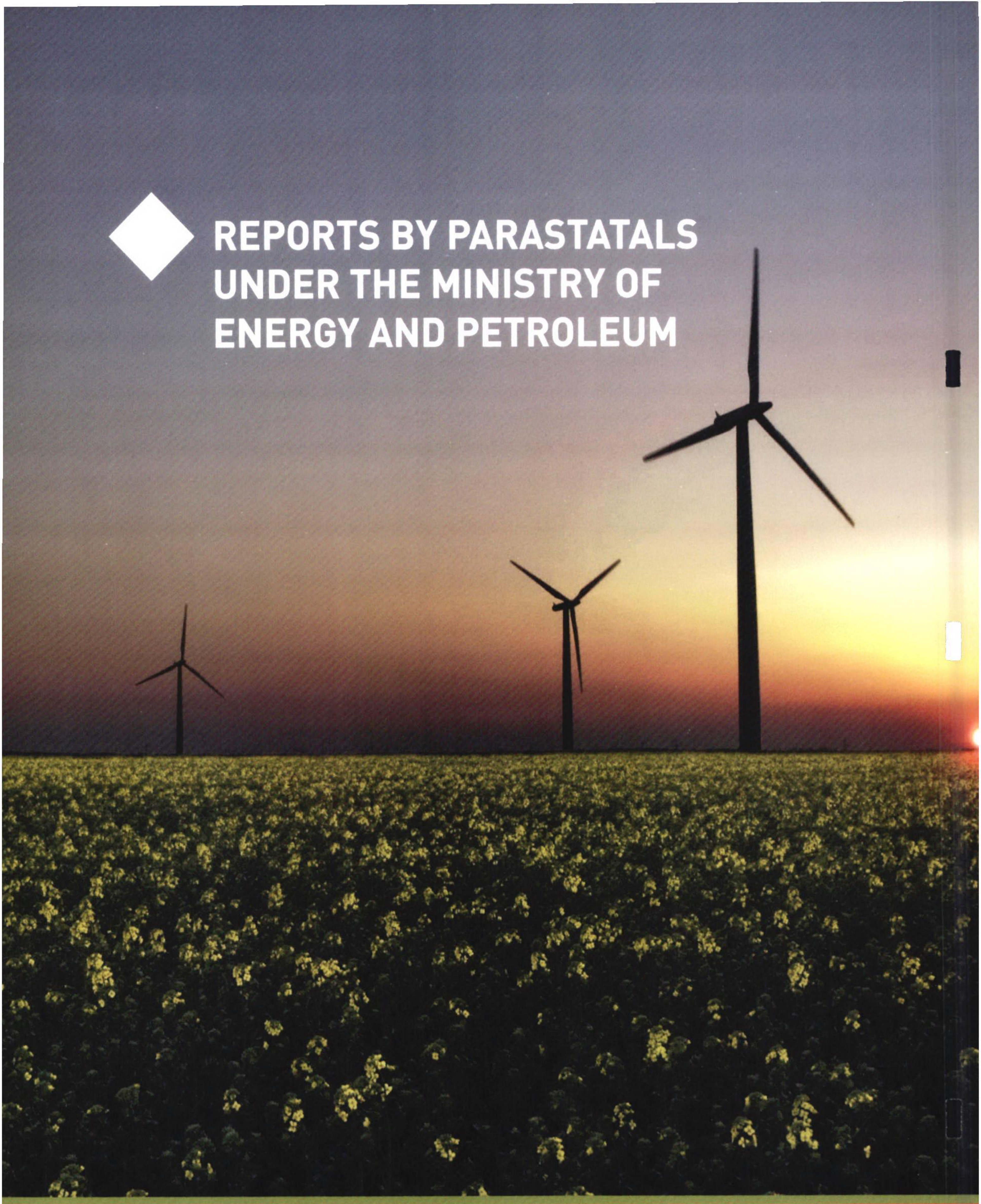
S/No	Project Name	Implementation Status	Benefits to Kenyans
11.	Supply of petroleum products in the country	a) Adjudicated petroleum tenders and enforced Open Tender System (OTS) terms and conditions. b) Held vessel scheduling committee meetings (VSM) in line with the product demand. c) Ensured that ullage allocation is equitably shared. d) Monitored the use of Common user LPG import handling and storage facilities in Mombasa. e) Coordinated several meetings on operationalization of Vital Tank Terminals International (VTTI) terminal so as to ensure the facility was put into use. KPC and VTTI prepared a tripartite agreement; discussions and review of this agreement are still ongoing between KPC, VTTI and Oil Marketing Companies (OMC's). The issue of tariff was ERC for review. f) Incorporated volumes for Petro-city terminal in the tenders. A total of 4 cargos were destined for Petro-city terminal. Some of the imports had already been received in the terminal. g) The guiding principles for receipt of products into Petro-city terminal were agreed on through VSM. h) Collected petroleum energy consumption data and forwarded to Kenya National Bureau of Statistics (KNBS). i) Monitored international and local pump prices. The prices were then analyzed and landed costs computed factoring in the exchange rate of the Kenya shilling against the dollar and forwarded to ERC for publications. j) Monitored petroleum stock position in the country on a daily basis to ensure there were no stock outs in the country as well as briefed the Cabinet Secretary and Principal Secretary on daily stocks.	• Ensure security of supply of petroleum products in the country. • Creates employment opportunities • Increased ullage thus business opportunities • Stabilized petroleum product prices by having adequate supply • Improved infrastructure
12.	Kenya Petroleum Technical Assistance Project (KEPTAP)	a) The World Bank credit was approved on August 2014 with the effective date being October 2014 b) Project Manager recruited c) Recruitment of the Financial Management and Procurement specialist is ongoing	• Enhanced local capacity in oil and gas industry • Creates employment opportunities • Petroleum institutions will be put in place • Improved management of oil and gas

S/No	Project Name	Implementation Status	Benefits to Kenyans
GEO-EXPLORATION DIRECTORATE			
13.	960 MW Coal Power Plant at Lamu	a) Resolved the dispute brought by a competitor of the Gulf Energy led Consortium that was awarded rights to develop the coal fired power plant. b) Held stakeholders meetings that enabled the Africa Development Bank (ADB) to provide Partial Risk Guarantee (PRG). c) Conducted a fact finding tour of the project area.	• Provision of added affordable power in the grids in time; • Minimize cost of litigation.
14.	960 MW Kitui(Mui) Coal Fired Power Plant	a) The procurement of the power plant was terminated in order to; i. Upgrade and have a more elaborate feasibility study. ii. Prepare tender documents and commence geotechnical, Strategic Environmental Assessment (SEA) and Resettlement Action Plan (RAP) studies for the coal plant development.	• Elaborate feasibility study will enable a clear engagement with the contractor; • Employment opportunities; • Benefits sharing will be clearly defined; • SEA will help manage the environment.
15.	Monitor, Supervise, Support and Report on Mui Basin Coal Block C (Yoonye-Kateiko) and Block D (Karunga-Isekele) Concession, Kitui County	a) Held meetings with Local Community Leaders and the Liaison Committee for Coal Blocks C and D to plan activities for the year. b) Funded the Liaison Committee to conduct five Coal Advocacy meetings within the blocks; and benchmarking tours of Base Titanium Project, Rabai Power Plant and Sondu Miriu Hydro Power Plant. c) Funded the ongoing land adjudication and registration for issuance of Title Deeds to the communities that will be affected by the coal project.	• Better understanding on issues regarding coal resource development in the area; • The liaison committee got first-hand information on what it takes to compensate and relocate people in large scale projects; • Peaceful coexistence between the community and the implementer; • Community ownership of the project; • Creates employment opportunities; • The local community will be issued land Title Deeds; • Availability of land for Coal extraction and other related developments.
16.	Support the Development of Coal in Mui Basin Block A (Zombe-Kabati) and Block B (Mutitu-Itiku), Kitui County	a) Held meeting with local community leaders and the Liaison Committee for Coal Blocks A and B to plan for the year. b) Re-advertised Expression of Interest (EOI) for the two blocks; and prepared & issued the RFP document to the three Bidders who had qualified. c) Funded the Liaison Committee for the blocks to conduct a workshop, five meetings Coal Advocacy meetings and benchmarking tours of Base Titanium Project and Mrima Bwiti resettlement area, Rabai Power Plant and Sondu Miriu Hydro Power Plant. d) Funded ongoing land adjudication and registration for issuance of Title Deeds to the Communities that will be affected by the Coal Project.	• Better understanding on issues regarding coal resource development in the area; • The liaison committee got first-hand information on what it takes to compensate and relocate people in large scale projects; • Peaceful coexistence between the community and the implementer; • Community ownership of the project; • Creates employment opportunities; • The local community will be issued land Title Deeds; • Availability of land for Coal extraction and other related developments

S/No	Project Name	Implementation Status	Benefits to Kenyans
17.	Carry out Pre-feasibility Coal Studies in the Karoo System in Kwale and Kilifi Counties	a) Conducted field visits to finalize the selection of sites for exploratory drilling of Coal and Coal Bed Methane that is to be contracted. b) Prepared tender documents for drilling to facilitate semi feasibility studies for a service contract to fast track coal exploration in Karoo.	• Employment opportunities to the local populace when contracted drilling starts.
18.	Geothermal Exploration in Morendat East Area, Naivasha, Nakuru County	a) Undertook reconnaissance survey in the project area b) Undertook detailed geological survey followed by geochemical and geophysical surveys. c) Undertook preliminary geothermal surface study in the Kijabe-Longonot station-Moi South Lake Road area.	• Increased acreage for geothermal development licensing will enhance opportunities for investment; • Employment opportunities for investment; • Enhance private sector participation; • Increased revenue e.g. surface fees.
19.	Carry out Geophysical survey in Elementaita and Otutu Geothermal Prospects, Gilgil, Nakuru County	a) Undertook reconnaissance survey in the project area b) Tested and calibrated Geophysical equipment to be used. c) Commenced geophysical surveys over the identified anomalies south of Lake Elementaita and at Otutu area.	• Increased acreage for geothermal development licensing will enhance opportunities for investment; • Employment opportunities for investment; • Enhance private sector participation; • Increased revenue e.g. surface fees.
20.	Monitor, Supervise, Support and Report on Geothermal Development in Kenya	a) Carried out resettlement program for the local community that was being affected by geothermal development in Olkaria area. b) Monitored, supervised and supported the ongoing geothermal operations by the Geothermal Development Company (GDC) at Menengai, Kenya Electricity Generating Company (KenGen) at Olkaria I, IV & V and at Eburru, OrPower4 at Olkaria III, Marine Power Generation Company Limited at Akiira and Africa Geothermal International Limited (AGIL) at Longonot.	• Empowerment of the people to start business; • Improved lifestyles; • Improved identification of Corporate Social Responsibility (CSR) Projects.
RENEWABLE ENERGY DIRECTORATE			
21.	Solar Energy technology Enhancement.	Completed and commissioned solar PVs in 115 institutions. Tenders for installation of a further 166 institutions are under processing.	• Provide energy to public institutions that are off grid e.g. schools, health centres and administrative offices.
22.	Monitoring, Supervising, Supporting and Reporting on IPP Power Generation Projects from Renewable Energy	a) Provided the necessary support for the development of power generation projects from renewable energy by Independent Power Producers (IPP). b) Coordinated meetings of the Feed-In-Tariffs Policy Committee, which reviewed proposals and progress reports by developers of wind, solar, small hydro and biomass projects. c) Mediated between the Local community and Developer for Kinangop Wind Park, where the community had raised some concerns which had the potential of derailing the project. Several meetings were held with the leaders, as well as with the community to find solution to those issues.	• Increased power generation from renewable energy sources.

S/No	Project Name	Implementation Status	Benefits to Kenyans
23.	Development of Wind Energy Technology.	Completed installation of 5 wind masts for pre-investment data logging.	• Availability of pre-investment wind data to be shared with developers.
24.	Small Hydro's Development	Completed mapping of all potential areas. The draft Atlas together with associated ArcGIS Reader software was received from consultant, and is being analyzed. Feasibility Studies for ten (10) sites is ongoing	• Increased investment opportunity; • Promotion of local enterprises; • Creates employment opportunities; • Access of electricity to local community; • Availability of baseline information to inform policy.
25.	Re-afforestation of catchment areas for hydropower generation	Re-afforestation of Upper Tana Phase I (265.9 Ha) was completed, while Upper Tana Phase II (311.5) and, Sondu Phase (297.5Ha) were ongoing. In addition, contracts were awarded for re-afforestation of Koguta and Nyamene areas. Other new sites are being identified.	• Improvement of hydrology for hydropower generation; • Reduction in environmental degradation;
26.	Survey and Documentation of renewable energy activities	Consultancy works in the 3 selected counties for the project are	• Availability of baseline information to inform policy. • Creates employment opportunities
27.	Installation of Solar Refrigeration Systems at Livestock Center in ASAL areas	Identified sites, designs were done and tender procurement is underway.	• Provide alternative energy for productive use; • Value addition and reduction of losses through preservation; • Cost cutting; • Enhanced livestock development.
28.	Study on stove emissions and types & quality of households Biomass stoves	The study being conducted is on-going.	• Improved health of the users; • Reduced carbon emission.
29.	Conduct Investment-Grade Energy Efficiency Audits	Provided resources to Kenya Association of Manufactures (KAM) to conduct 7 Energy Efficiency Audits.	• Enhanced energy efficiency; • Increased profitability of industry hence competitiveness.
ADMINISTRATION AND SUPPORT SERVICES DIRECTORATE			
30.	Project Monitoring and evaluation	Carried out Monitoring and Evaluation (M&E) exercise of the following projects; i. Afforestation of Sondu water catchment area (Kericho, Nakuru and Bomet counties); ii. Afforestation of Upper Tana catchment area (Meru, Nyeri and Kirinyaga); iii. Construction of transmission lines and associated substations • Nyahururu – Nanyuki line • Nanyuki – Isiolo – Meru line • Ishiara – Embu – Kyeni line • Nairobi – Mombasa line iv. Coal development in Kitui	• Ensured timely implementation of projects; • Collected data to inform policy.

REPORTS BY PARASTATALS UNDER THE MINISTRY OF ENERGY AND PETROLEUM



KenGen
Energy for the nation.

KENYA ELECTRICITY GENERATING COMPANY LIMITED

July to December 2014

CONTENTS

KenGen

> Reliable and affordably priced electricity is essential for the growth of a country's economy and key to its posterity

1 INTRODUCTION

Kenya Electricity Generating Company [KenGen] is the nation's leading power producer, generating 75% of the electricity consumed nationally.

Kenya is in need of sufficient, reliable and competitively priced power to support the Vision 2030 Industrialization goal. Demand for electricity has grown steadily over the last decade at a rate of 8-10% and is projected to increase exponentially over the next 15 years from the current 2GW to 33GW. As the largest power producer in Kenya, KenGen's responsibility is to deliver affordable, reliable and clean energy today, while making investments needed to ensure a sustainable future.

We expect to inject an additional 1,700MW into the national grid by 2018. By modernizing and diversifying our generating plants now, we will produce energy more efficiently, retire older plants and reduce reliance on hydro. KenGen has strengths of scale, diversity and expertise, backed by an exceptional record of accomplishment and service to achieve this target. Our vision is to become the market leader in the provision of reliable, safe, quality and competitively priced energy in the Eastern Africa Region. We are transforming the way we manage all our functions to accelerate achievement of our targets quicker. Our sharp focus is delivering new generation capacity.

2 EXECUTIVE SUMMARY

Reliable and affordably priced electricity is essential for the growth of a country's economy and key to its posterity. The Government and industry players have identified high cost of electricity as a challenge. Initiatives to reduce electricity costs have been mooted to bolster economic growth while meeting energy and environmental goals.

KenGen shoulders the bulk of this need for growth despite the challenges of financing and sustainability of generation sources. With only 29% of the population accessing electricity, there is immense potential to grow and meet the rising demand. To succeed in its vision of a capacity base of 3GW grid by the year 2018, KenGen is pursuing excellence in areas of capital growth, regulatory, operations and organizational health.

Geothermal Spa

Under the Kenya Government's plan to add 5,000MW to the National Grid, KenGen has been tasked to deliver 844 MW by 2016. Of this target, KenGen has already delivered 320MW of Geothermal, 24MW of hydro, and 20MW of wind. A total of 364MW has been achieved from the target leaving a balance of 480MW by 2016. The cost of delivering the additional 480MW into the National Grid by December 2016 as planned is estimated to be Kshs.180 billion. KenGen proposes to raise the required funding through a mix of equity and debt.

KenGen has identified geothermal mode of generation as the key driver in achieving the strategic targets. In line with this, the Company has embarked on a fast tracked geothermal drilling programme. This will ensure steam availability to support the implementation of the geothermal projects. This is consistent with the overall goal of achieving competitive tariffs as well as optimizing renewable energy into the system.

To ensure adequate funding, KenGen has explored broader modes of financing including the Public Private partnerships (PPP). This involves a long-term partnership with a private partner to develop power plants. The private partner will offer financing, project management as well as share project risks. In line with this, KenGen's PPP projects including 560MW of geothermal, were granted approval. Therefore, KenGen is procuring a partner for Olkaria VI 140MW project through this PPP framework.

KenGen is a key stakeholder in the review of the National Energy Policy and Act. The draft proposes the establishment of the Hydro Risk Mitigation Fund. This Fund will alleviate KenGen's perennial hydro risks. Further, the Bill proposes the establishment of a Renewable Energy Resource Advisory Committee to advise on among other issue the management of geothermal resources.

3. FINANCIAL PERFORMANCE

The half year ended 31 December 2014 was a success for KenGen. The Company registered continued growth in revenues arising from increased capacity from the newly completed power plants.

We sold 3,383 Gwh to Kenya Power during the half year ended December 31, 2014 compared to 3,098 Gwh in the half year ended December 31, 2013.

Our overall revenue grew by 36% from Kshs.8,916 million in December 2013 to Kshs.12,145. million in December 2014. The increase is attributed to improved electricity revenue from new capacity injected to the national grid. Electricity revenue rose from Kshs 8,432 million to Kshs.11,621 million, an increase of 38% mainly due to increase in contracted capacity and units sold

We strengthened our efforts to optimized cost as envisaged in our operational excellence strategy. There was increase in operating costs from Kshs.5,696 million in December 2013 to Kshs. 6,953 million in December 2014, an increase of 22%. The increase reflects the growth in our expansion plant and operations.

The implementation of new power plants is capital intensive. The company's debt portfolio has been growing significantly over the past few years due to implementation of Sondu Miriu - 60MW, Kipevu III - 120MW, Kindaruma - 32MW, Tana - 20MW, Sangoro - 21MW, purchase of two Rigs, drilling of wells in Olkaria, Wellheads construction, Ngong Wind - 20.4MW and Olkaria I & IV - 280MW. The financing of these projects has a grace period of up to 10 years and interest during construction is capitalized as cost of the project. Financing costs decreased by 1.% from Kshs.1,385. million in December 2013 to Kshs.1,377 million in December 2014, mainly due to in reduced interest expenses on matured borrowings for completed project.

We continued to sustain our ambitious investment as per the Good to Great Strategy. As a result, our assets base increased by 16% from Kshs 210,020 million to Kshs.243,507 million mainly due to increased investment in new power plants, namely; Geothermal Wellheads, Olkaria I & IV power plants, drilling of wells purchase of land for future projects in Olkaria field and Ngong Wind project.

The implementation of the projects lined up in our strategy requires high cash in form of counter funds with development partners. We have continued to optimize the available resources to ensure timely completion of the projects.

4. OPERATIONAL PERFORMANCE

During the half year, high availabilities were recorded in KenGen's generating plants leading to favourable financial returns.

Plant Capacity Availabibty tracking for the period Jul - Dec 2014

PLANT	ACTUAL(%)	TARGET (%)
HYDROS	97.56	90
DIESEL	89.69	85
EMBAKASI GT - ACTIVE	96.47	88
EMBAKASI GT - REACTIVE	96.47	88
OLKARIA II	99.29	94
OLKARIA IV	97.90	94

Energy Plants Availability tracking for the period July to Dec 2014

PLANT	ACTUAL (%)	TARGET (%)
OLKARIA I	97.33	97
SANG'ORO	96.83	90
OFF GRID	94.60	84
EBURRU*	71.53	80
WELL HEADS*	77.13	80
OLKARIA IV	97.90	94

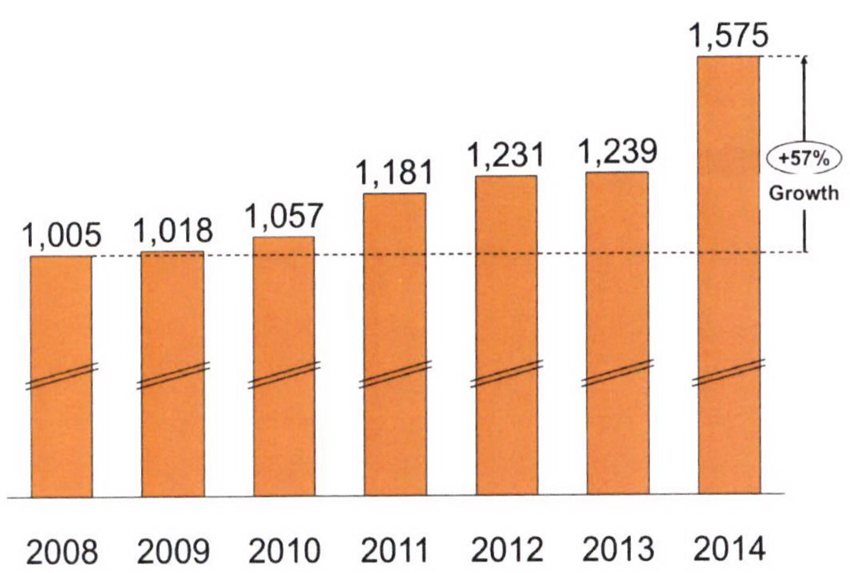
** Performance below target due to evacuation challenges, which are being resolved.*

5. PROJECTS EXECUTION STATUS

The Kenya Government committed to install an additional 5GW by December 2016. This target will go a long way to meeting the current energy demand. The Company has been involved in the preparation of the sector's implementation plans; identifying road maps, critical paths and interrelationships between key players. Multi-agency efforts have been stepped up with high level representation in the development of the new energy policy regulations.

The Olkaria I & IV 280MW flagship project, with a generation overall tariff of around US Cents 7, was commissioned by His Excellency the President in October 2014. It is the first of a series of similar competitive projects all aimed at meeting the country's energy demands in line with Vision 2030. By December 2014, KenGen's installed Capacity had risen to 1575MW.

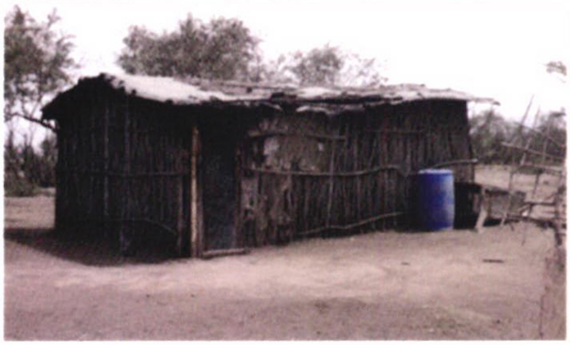
KenGen INSTALLED CAPACITY (MW) – DEC. 2014



Project	Capacity (MW)	Mode	Progress (%)	Status
Ngong I	6.8	Wind	99	All the turbines were commissioned and currently in the process of connecting the wind farms to the new 11/66kV substation after successful completion
Ngong II	13.6	Wind	99	All the turbines were commissioned and currently in the process of connecting the wind farms to the new 11/66kV substation after successful completion
Olkaria I (Unit 4&5)	140	Geo	100	The plant was fully commissioned on 31st December 2014
Olkaria IV (Unit 1&2)	140	Geo	100	The plant was fully commissioned on 25th August 2014
Meru Wind Project	100	Wind	15	MoU on land signed. Project at feasibility stage.
Olkaria Unit 6	70	Geo	20	Environmental Social Impact Assessment (ESIA) done, procurement of consultants in progress. To be completed by December 2016. Financing plan on-going.
Olkaria VI	140	Geo	10	Procurement of transaction advisor on going. Drilling on going.
Wellhead Generation	70	Geo	60	22.8 MW commissioned in the period and 5MW undergoing commissioning against an annual target of 30MW while manufacture of an additional 15MW is in progress.

RAP MAJOR MILESTONES

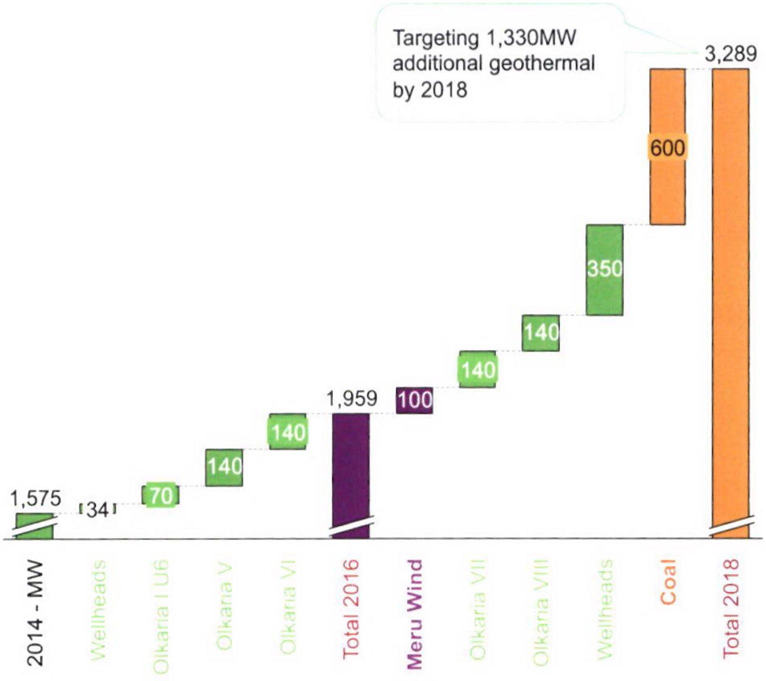
Old Houses



RAP Houses

KenGen

KENGEN GROWTH STRATEGY



Source: SBP; BD Division

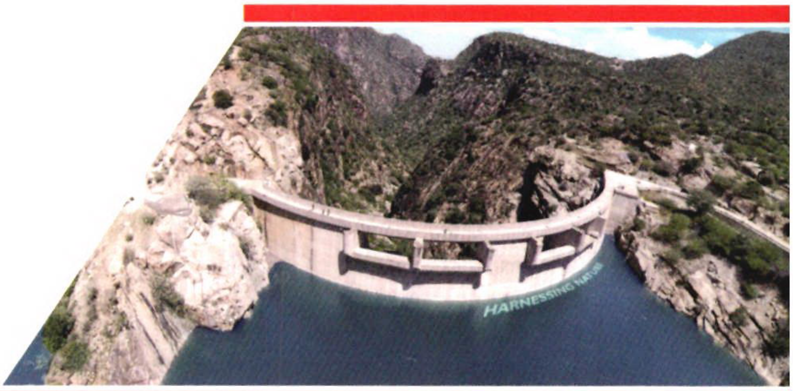
6. CHALLENGES AND PROPOSED MITIGATION

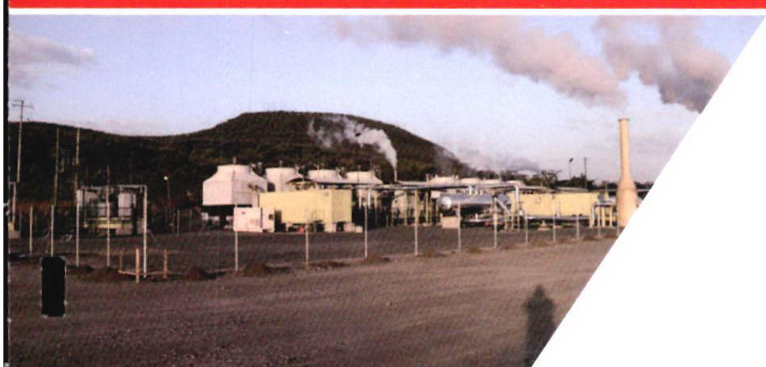
Challenge	Mitigation
Accelerating geothermal development	KenGen is accelerating drilling and deployment of geothermal well-heads and power plants using two acquired rigs to fast-track implementation of geothermal generation.
Capital financing	There is need to leverage on capital markets for injection of private capital to achieve an ambitious capital spend target of US$ 5 billion. Capital structuring (debt equity) and National Treasury support will be necessary while exploring alternative revenue opportunities.
Cost reflective tariffs	Headway is required to finalize on 20-packed Power Purchase Agreement (PPA) items to ensure equitable value proposition for all partners as well as fast-tracking PPAs.
Land / site acquisition	Facilitate acquisition of land (sites) for key projects such as coal, wind and geothermal expansion.
Stakeholder / community issues	Engagement and Government intervention especially in land compensation, amicable community relations and sharing of resources.
PPP framework development	Build on Public-Private-Partnership / Joint Venture framework to accelerate project financing.

7. CONCLUSION/WAY FORWARD

Going forward, KenGen aims to enforce its geothermal footprint. To achieve the growth projections targeted by the company requires resilient sourcing of capital. An excellent working relationship is necessary between the industry players and Government for the achievement of all the set goals.

Kenya strives to achieve the +10% annual growth required to attain developing country status through Vision 2030, conscious efforts must be implemented to power the desired shift.






KenGen
Olkaria IV Geothermal Power Plant
This power plant was officially commissioned
by
His Excellency Hon. Uhuru Kenyatta, C.G.H.
President and Commander-in-Chief of the Defence Forces of
the Republic of Kenya
on
Friday, 17th October, 2014
HARAMBEE

KENYA PIPELINE COMPANY LIMITED

July to December 2014

CONTENTS

> The pipeline is a strategic infrastructure and plays a key role in facilitating economic growth and development in the Region.

1 INTRODUCTION

The Kenya Pipeline Company (KPC) Limited is a state corporation wholly owned by the Government, incorporated on 6th September 1973 under the Companies Act (CAP 486) Laws of Kenya. Commercial operations commenced in February 1978.

The Company is charged with the task of constructing refined oil pipelines and transporting the petroleum products from Mombasa to the hinterland. The pipeline system currently consists of a network 1,221 km of pipeline running from Mombasa through Nairobi to the Western Kenya towns of Nakuru, Eldoret and Kisumu. KPC also has petroleum products storage facilities at its depots located in Nairobi and the major towns of Mombasa, Nakuru, Eldoret and Kisumu with a total capacity of 286,000 m3. The Company manages and operates the 326,233m3 imports storage facility at Kipevu (KOSF).

To date, KPC has cost effectively, efficiently and safely transported petroleum products through the pipeline, for consumption in Kenya and the neighboring countries which include Uganda, Rwanda, Burundi, Eastern Democratic Republic of Congo (DRC), South Sudan and Northern Tanzania. The pipeline throughput has increased from 800,000 m3 in 1978 to 5.3million m3 in 2013/14.

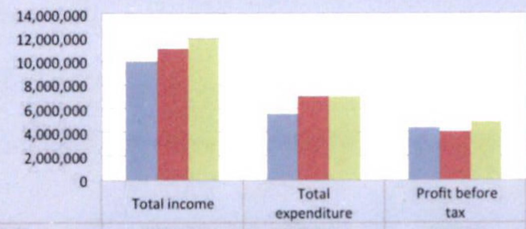
The pipeline is a strategic infrastructure and plays a key role in facilitating economic growth and development in the Region.

2 EXECUTIVE SUMMARY

The Company was able to achieve a throughput of 2,893,207 m3 which was below the set target of 2,971,498.00 m3 by 2.63%. Throughput performance was affected mainly by power outages, delayed vessels and slow evacuation of products by the Oil Marketing Companies (OMCs) resulting in pipeline congestion and shutdown due to lack of ullage at upcountry depots.

The Company's financial performance during the said period was below the budget targets as shown below. The income realized for July – December 2014 was Kshs. 11.065 billion against a target of Kshs. 11.909 billion. Profit before Tax was Kshs. 4.027 billion, which was 7.4% below the profit of Kshs. 4.346 billion realized in July – December 2013 and 17% below the target. KPC was unable to achieve its financial targets mainly due to the throughput performance.

KPC's Financial Performance July - December (Kshs. '000)



	Total income	Total expenditure	Profit before tax
2013	9,897,848	5,551,340	4,346,507
2014	11,065,860	7,038,944	4,026,916
Target 2014/15	11,909,442	7,057,776	4,851,666

To ensure security of supply and enhance pipeline capacity and integrity, KPC is undertaking major infrastructure enhancement projects whose contracts were signed during the period under review and construction works commenced. The projects that commenced are replacement of the Mombasa – Nairobi Pipeline Project, Construction of additional tanks in Nairobi Terminal and Construction of a parallel pipeline from Sinendet to Kisumu.

3. FINANCIAL PERFORMANCE: JULY – DECEMBER 2014

The income realized for July – December 2014 was Kshs. 11.065 billion against a target of Kshs. 11.909 billion, while the operating expenses were Kshs. 7.038 billion, which was below the budget target by 0.27% as shown in Table 1 below. Profit before Tax was Kshs. 4.027 billion, which was 7.4% below the profit realized in July – December 2013.

The net assets increased to Kshs. 47.6 billion from Kshs. 44.8 billion in December 2013.

Table 1: Summary Financial Performance in Kshs: July - December 2014

ITEM DESCRIPTION	Achieved July – December 2013	Performance July - December 2014		
		Achieved	Budget Target 2014/15	Variance %
Transport Revenue	9,785,363,073	10,834,527,399	11,579,111,181	-6.4%
Other income	112,484,454	231,332,917	330,331,041	-30.0%
Total income	9,897,847,527	11,065,860,316	11,909,442,222	-7.1%
Total business/direct expenses	2,464,558,474	3,753,045,119	3,881,776,851	-3.3%
Total support/indirect expenses	3,086,781,613	3,285,899,263	3,175,999,241	3.5%
Total expenditure	5,551,340,087	7,038,944,383	7,057,776,092	-0.3%
Profit/loss (before tax)	4,346,507,440	4,026,915,934	4,851,666,130	-17.0%
Tax provision	1,320,000,000	1,457,284,860	1,501,418,778	-2.9%
Profit/loss (after tax)	3,026,507,440	2,569,631,074	3,350,247,352	-23.3%

The Company's financial performance has been affected by throughput performance which was below the target by 2.63% thus affecting revenue. The Closing cash position has reduced by 47% to 2.3 billion due to payments made for on-going projects.

4 OPERATIONAL PERFORMANCE

4.1 Operational Performance

The cumulative throughput for the period July – December 2014 (including transfers from the Kipevu Oil Storage Facility (KOSF) to Shimanzi Oil Terminal and back loading/exports) was 2,893,207 m3 against a PC target of 2,971,498.00 m3. This was a negative variance of 2.63% below the target as depicted in Table 2 below.

Table 2: Throughput Performance in m3: July - December 2014

	Target	Achievement	Variance	Variance %
July	471,807	487,156	15,349	3.25%
August	490,991	470,389	-20,602	-4.20%
September	483,520	488,896	5,376	1.11%
October	523,712	517,871	-5,841	-1.12%
November	513,286	454,127	-59,159	-11.53%
December	488,182	474,769	-13,413	-2.75%
TOTAL	2,971,498	2,893,207	-78,291	-2.63%

In addition to the above volumes, KPC directly transferred to SOT either through the spur line or Kenya Petroleum Refinery Ltd. 172,230 m3 due to the non-availability of ullage at KOSF for private imports.

4.2 Pipeline Down time performance

Line I was off for 349.99 Hours as per Table 2 below. Line 2/3 and Line 4 performances are pegged on performance of Line 1 and evacuation in receiving Depots to create space.

4.3 Main Operational Challenges

Main operational challenges experienced during the period under review were as follows:

i. Throughput during the period was below target by 2.63 % as a result of slow evacuation by customers resulting in pipeline congestion and shutdown due to lack of ullage at upcountry depots.

ii. Delayed vessels resulted in customers lacking entitlement and hence reduced performance.

iii. Pipeline offline was affected by factors in Table 3 below.

Table 3: Downtime Summary in Hours July-December, 2014

Reason for Offline	LINE I (HRS)	%
Power Failure/Power Dip	119.39	34.11
Equipment failure/testing	51.39	14.68
Operational failure due human error	3.27	0.93
Planned shutdown for maintenance(by KPC and KP) & month-end stock taking	105.53	30.15
Lack of ullage in upcountry KPC Depot due low evacuation by OMCs	27.65	7.90
Lack of Product at KOSF due to PMS vessel delay	38.93	11.12
Emergency	3.83	1.09
TOTAL	**349.99**	**100**

5 PROJECTS EXECUTION STATUS

No	Project Name	Project Cost	Budget 2014/15 (Kshs.)	Plan Start Date	Plan End Date	Implementation Status
1.	Replacement of Mombasa-Nairobi Pipeline (Line-5)	USD 484,502,886	Kshs.19.56b	14/05/12	16/08/16	The construction contract was awarded to M/S Zakhem International with commencement date of on 11th Aug, 2014. The contractor has undertaken the following activities:- • Submitted a performance guarantee in the sum of USD 48,450,289 being 10% of contract sum. • Submitted list of vendors for key equipment and pipe manufacturer which was approved by KPC on 18th Aug 2014. • Delivered Preliminary& General items comprising of project vehicles and computers in September/October, 2014 and • Construction of site offices for the Project Engineer at PS1, PS5 and PS7 in October 2014 • Placed order for manufacture of Line pipes and is the process of sourcing for other material and equipment.

No	Project Name	Project Cost	Budget 2014/15 (Kshs.)	Plan Start Date	Plan End Date	Implementation Status
2.	Construction of Additional Loading Facilities at Eldoret Depot	Kshs. 335,485,367	Kshs.300m	01/07/13	23/09/15	The tender was awarded to Empro Electrical and Mechanical Engineering Ltd. and the Contract signed on February 24, 2014. Site handover was done on March 10, 2014. Works commenced on April 9, 2014. Ground excavation on-going and construction works are progressing. Key activities on-going include:- • Compaction of sub base, haulage of murram, sand, ballast and paving slabs to the site. • Line-pipes for fire fighting system have been delivered to the site. • Work on protection of existing pipelines started.
3.	Construction of Additional Storage Tanks At Nairobi	Kshs. 4,613,880,744	Kshs.1.2b	01/07/13	06/11/16	The Contract was awarded to Prashanth Projects Ltd. on July 30, 2014 and contract signed on September 23, 2014. Contract negotiations and signing was held on 23rd September 2014 and a commencement date was set for 22nd October 2014. Summary of progress as at December 2014 is as follows:- • Mobilization completed • Site survey complete • Geotechnical survey complete • Procurement of materials on going • Detailed designs preparations on going
4.	Construction of Jet-A1 Storage Tanks at JKIA	Not yet awarded	Kshs.1.4b	07/01/14	15/02/17	Tender for the Project was advertised on 13th Nov. 2014. The opening date was extended to 15/01/2015 due to requests from bidders.
5.	Construction of Parallel Pipeline from Sinendet To Kisumu (Line 6)	USD 49,400,000	Kshs.1.5b	01/10/13	27/06/16	M/s China Petroleum Pipeline Bureau was awarded the tender on 31st October 2014 and the contract signed on 29/11/2014. The commencement date has been set for 05/01/2015. Key activities achieved during the period of review include:- • Site survey commenced • EIA Scoping study report completed
6.	Construction of Bulk Liquefied Petroleum Gas (LPG) Storage and Bottling Facility in Nairobi	Not yet awarded	Kshs.500m	14/02/14	09/12/16	Procurement of project site still pending. After procurement of land subsequent project activities which include ESIA and designs will commence.

No	Project Name	Project Cost	Budget 2014/15 (Kshs.)	Plan Start Date	Plan End Date	Implementation Status
7.	Eldoret-Kampala-Kigali Refined Petroleum Products Pipeline.	Not yet awarded	Kshs.12.64m	2015/16	2016/17	Tenders for Expression of interest opened on 30th September 2014, eight (8) out twenty-seven (27) bidders were prequalified for the EPC contract. Issuance of Request for Proposals to the prequalified bidders is pending awaiting feedback on financing from the Ministries of Finance from the partner states.
8.	Hoima-Lokichar-Lamu Crude Oil Pipeline	Not yet awarded	Kshs.500m	2015/16	2017/18	The consultancy for Feasibility Study and Preliminary Design was awarded to M/s Toyota Tsusho Corporation and the contract was signed on 13th Nov 2014 in Kampala, Uganda. The kick off meeting was held on the 13th November 2014. The inception report was submitted on 18th December 2014, reviewed by Project Steering Committee (PSC) on 19th December 2014. Comments of the PSC were submitted to the Consultant who has addressed them and submitted a revised report on 26th December 2014.
9.	Liquefied Natural Gas Project	Not yet awarded	Kshs.19.26m	01/12/13	31/12/25	The off-take of LNG, which is the mandate of KPC is hinged on the availing of the LNG receiving terminals. During the Energy sector utilities retreat with members of the departmental committee on energy, communication and information-national assembly held in mid-September, MOEP reported that there may be considerable change in the energy landscape in the country following the discovery of commercially viable gas in Hadado, Wajir. It was therefore reported that MOEP may have to review the earlier arrangements of importing LNG for electricity generation with a view to utilizing the local LNG. For this reason, KPC did not make significant progress on the discussions for the off-take of LNG from Qatargas. However, during the period under review the Company prepared plans to update Qatar gas other key stakeholder on the emerging developments within the Government on use of domestic LNG for electricity generation in order to maintain good corporate image. In addition, there is need for the Company to progress capacity building for the LNG team as the final decision is awaited.

6 CHALLENGES AND PROPOSED MITIGATION

	Challenges	Proposed Mitigation
i.	**Unreliable power supply:** This is reflected in the power outages, frequent over-voltage and under-voltage as recorded in KPC pump stations.	In the short term KPC is engaging Kenya Power Management to ensure reliable power supply. In the long term the Company is evaluating the need for considering alternative sources of power including power back up.
ii.	**Customs Clearance:** Customs clearance processes slow down evacuation of products from KPC system leading to congestion of trucks in the depots resulting in safety and security threats.	KPC has been continuously engaging KRA on improvement of clearance procedures. KRA needs to ensure reliability of its systems or provide back-up to ensure business continuity. All stakeholders should synchronize working hours to match KPC shift that starts loading trucks at 4.00 a.m. De-bonding of KPC facilities to handle only duty paid material.
iii.	**Low evacuation of products from the pipeline system:** The rate of evacuation of products by the OMC's from the system does not match the volume of planned imports. The result in most cases is clogging of the pipeline system leading to lack of ullage at KOSF for imports and stoppage of pipeline operations.	OMC's to be required to evacuate products from KPC's inland tanks within 10 days for local products and 14 days for transit products. KPC intends to construct and / or lease storage facilities to provide operational flexibility and address the ullage constrains challenges and to increase national stock days for security of supply.
iv.	**Unreliable Communication Infrastructures:** The Company relies on third parties communication network. When communication is not available the operation of the pipeline is slowed since the Nairobi Control Centre cannot be able to see various variables (such as pressure and flow rates).	A 40 core fibre optic cable will be laid below the new Line 5 Pipeline. We are also considering VSAT for communication redundancy.
v.	**Slow evacuation of products at Nairobi:** The product transfers from the KPC Nairobi Terminal to the OMCs' depots are currently at an average of 5,000m3 per day based on requests by the Oil Marketers against handling capacity of approximately 11,000m3 per day. This leads to clogging of the pipeline system and Ullage constraints at KOSF and Nairobi Terminal.	KPC has continuously engaged OMCs to enhance utilization of their Terminals in Nairobi to enhance evacuation. Petrocity has invested in a common user truck loading facility at Konza KPC is evaluating investing in a common user facility within the environs of Nairobi to provide off
vi.	**Aged pipeline:** The Mombasa – Nairobi pipeline is 35 years old and requires a lot of rehabilitation works while some equipment have become obsolete and damaged due to wear and tear.	Plans are at an advanced stage to replace the pipeline. Contractor already on site.
vii.	**Limited Capacity of the Sinendet – Kisumu pipeline:** The Sinendet – Kisumu pipeline capacity is limited to delivering 2,400 m3/day to Kisumu Depot against a demand of 4,500 m3/day, resulting in product grade stock-outs at the depot from time to time.	Plans are at an advanced stage to construct a parallel pipeline. Project already awarded.

	Challenges	Proposed Mitigation
viii.	**Product transfer operations** a. Single source of JET A-1 from KPRL supply to Moi International Airport. b. Inflexibility in scheduling of transfers of PMS and DPK grades from KOSF to OMC's Terminals in Mombasa through KPRL.	KPC is evaluating the need for a direct pipeline from KOSF to MIA for security of supply. KPC will upgrade the Spur Line into a multiproduct transfer line
ix.	**Reliance on single Jetty for Imports:** Kipevu Oil Terminal (KOT) handles over 99% of the country's imports. Reliance on a single jetty for offloading exposes the country to supply disruptions in case of a catastrophe	There are plans by Kenya Ports Authority (KPA) to relocate the jetty and enhance it to be able to receive four vessels at a time. KPC considers to invest in the construction of the offshore jetty
x.	**High Demurrage Costs:** These is caused by: a. Planning OTS imports volumes over and above the capacity of KOSF tanks. b. Delays due to pre discharge quality corrections at berth especially for PMS and Jet A-1. c. Low discharge flow rate for imports destined to OMC's Mombasa Terminals and KPRL. d. Slow evacuation of products from KPC system by OMC's. e. Tidal restrictions for large long range vessels. f. Delays in clearing by the importer with KPA. g. KRA documentation before the vessel is allowed to berth.	a. Improve evacuation of the upcountry depots. Harmonize storage facilities in tandem with regional import demand. b. Strict adherence to imports specifications by importers c. Upgrading of the receiving terminals facilities and ensure vessel calling at KOT are of suitable flow capacities. d. Reduce the storage period from 30 to 14 days for transit and 10 for local. e. Consideration for waiver or align imports (LAYCAN) to the tidal charts. f. Prompt clearance. g. De-bonding of KOSF to handle only duty paid material
xi.	**Securing KPC's Facilities and Property:** These concerns arise due to encroachment of pipeline Right Of Way and facilities.	KPC is seeking to have the ROW and land where it has facilities delineated to secure pipeline boundaries and facilities. Other proposed measures include, mapping of pipeline by the Ministry of Lands to avoid innocent encroachment and constant Liaison with government security agencies to secure strategic facilities.
xii.	**Terrorism Threats and Vandalism of Pipeline facilities:** Terrorism and vandalism is a major concern in KPC.	KPC is installing Integrated Security System in all its installation to enhance security surveillances. In addition, the Company will maintain constant liaison with government security agencies to secure the company facilities.
xiii.	**Collateral Financing Arrangements (CFA):** KPC is exposed due to CFA administration in that it is an area which requires expert Collateral Managers. Slow clearance of CFA materials also contribute to the clogging of pipeline system due release procedures.	KPC is reviewing the CFA arrangement with a view of discontinuing the Company's involvement in the arrangement.

7 CONCLUSION AND WAY FORWARD

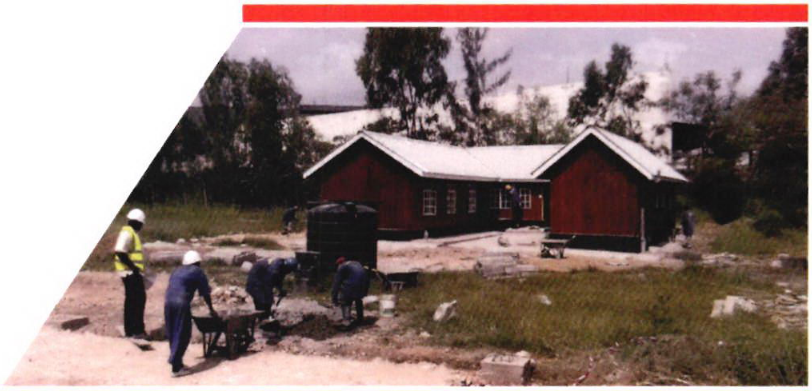
KPC is currently undertaking major capacity expansion projects which are critical for enhanced business performance. The on-going projects are to be financed through loans and internally generated funds totalling about Kshs, 70 billion.

Further, the recent discovery of significant quantities in Oil and Gas within the East and Central African Region has attracted international interest in the Region's oil sector. Prospecting and extractive activities are expected to dominate the near term while commercialisation of these resources, starting 2017/2018, is bound to lead to unprecedented wealth and risk in the Region.

The developments in Oil and Gas industry is expected to provide a major stimulus to the local economies and will require extensive capital investment in new infrastructure and upgrading of the existing infrastructure.

KPC expects to play a significant and leading role in these developments. To this end, the Company has developed a ten (10) years Transformational Plan which will enable the Company build on gains made since inception, focus and position itself to take up emerging opportunities in the oil and gas sector and play a role in making Kenya a middle-income country by the year 2030.

KPC require Government support in implementation of the on-going and planned future infrastructural projects.



Powering the Vision

July to December 2014

CONTENTS

The Company discovered a new Menengai geothermal field and has drilled the largerst producing well in the country with an output of 31 MWe.

1 INTRODUCTION

The Geothermal Development Company Limited (GDC) is 100% state-owned corporation registered under the Companies Act (CAP 486). It was incorporated in December 2008 as a special purpose vehicle to accelerate the development of geothermal energy in Kenya. The Country is endowed with a huge potential of high temperature resource estimated at about 10000 MWe that largely remains untapped. Geothermal is the least cost (most economic) source of electric power for Kenya. Despite the fact that geothermal is the best option for Kenya and that the Country has had a long geothermal development period spanning over 50 years, only 200 MW was connected to the national grid five years ago. This slow progress is attributed to the fact that geothermal development requires large upfront financing which the existing public entities may not support by their balance sheets. In addition, high upstream development risks have deterred private sector participation. GDC falls under the oversight of the Ministry of Energy (MoE). It is mandated to:

a) Prospect for, invest in and utilize geothermal resources in Kenya for electricity generation and other direct uses, undertake geo-scientific survey, conduct drilling works, develop the necessary infrastructure for the utilization of the geothermal resource for electricity generation and other direct use of geothermal energy and sustainably manage the resources.
b) Manage public resources such as funds and rigs and other infrastructure required for faster geothermal development.
c) Develop the human capacity in Geothermal Technology in Kenya to support sustainable growth of the geothermal sector
d) Support and promote development of direct uses of geothermal resources.
e) Consulting on geothermal energy, other geo-science and resource projects, environmental studies and project management
f) Market geothermal as a benign environment friendly and least cost power source for Kenya
g) Support the Government efforts to attract funding and investment in geothermal energy for rapid development
h) Sell steam to power generators

GDC has only operated for five year since being incorporated. In this period, the Company has been able to set up offices in Nairobi, Naivasha, Nakuru and Baringo, recruit and train over 800 staff, procure seven rigs, drill 61 wells at Olkaria and Menengai and currently owns 530 MW of steam from a total of 84 wells in both fields. Most importantly, the Company discovered a new Menengai geothermal field and has drilled the largerst producing well in the country with an output of 31 MWe.

Currently, the Company is undertaking infrastructure development necessary for the opening of the Baringo- Silali geothermal prospect. In the same period, the Company has engaged the first three independent Power producers for the development of the 105 MW power plants in Menengai thereby helping the Government raise about Kshs 19 billion from the private sector for infrastructure development. This project from discovery of steam to power generation will take five years which is the shorted gestation period worldwide for a geothermal project of that size. The firm has put in place administrative, operational and financial systems to support it activities covering the whole country.

2 EXECUTIVE SUMMARY

The Ministry of Energy and Petroleum has rolled out programmes for the development of 5000+MW of energy by the year 2016. Under this framework, GDC will develop 810MW of geothermal energy from three geothermal prospects. The development of the 810MW of geothermal by GDC will be based on the ongoing activities in Menengai and additional works to be commissioned in Suswa and Baringo-Silali geothermal fields. The plan was to incrementally develop the 810MW from the different projects over a period of the next 40 months from December 2013 as shown in the tables below.

FAST TRACKING GEOTHERMAL POWER GENERATION – GDC's CONTRIBUTION								
	Dec-13	Jun-14	Dec-14	Jun-15	Dec-15	Jun-16	Dec-16	
	6 Months	12 Months	18 Months	24 Months	30 Months	36 Months	42 Months	PROJECT TOTALS
MENENGAI	-	-	-	-	100	60	300	460
SUSWA	-	-	-	-	-	50	100	150
BARINGO-SILALI	-	-	-	-	-	-	200	200
TOTAL (MW)	-	-		100	60	50	600	810
CUMMULATIVE MW	0	0	0	100	160	210	810	

3 FINANCIAL PERFORMANCE

The table below summarizes the financial performance for the period July 2014 to November 2014

EXPENDITURE	Approved Budget FY 2014/15	Actuals	Commitment	Total	Expenditure % (a)	Expenditure % Target (5th month) (b)	% Variance (a-b)
Recurrent	702,000,000	233,531,243	58,968,757	292,499,999.88	41.67%	41.67%	0.00%
Development	17,613,900,000	1,992,262,131	886,697,447	2,878,959,578.00	16.34%	41.67%	-25.33%
TOTAL	**18,315,900,000**	**2,225,793,374**	**945,666,204**	**3,171,459,578**	**17.32%**	**41.67%**	**-24.35%**
Development Index	25.1			9.84			

This budget includes a development loan from the India Export Import Bank of US$ 200 million which is yet to be signed.

4 OPERATIONAL PERFORMANCE

GDC main activities include the following

4.1 Infrastructural Development

The infrastructural development phase involves construction of main access roads, establishment of drilling water system including electricity for powering the pumping system, well pads and drilling fluid recirculation ponds. These activities will be undertaken by GDC.

4.2 Steam Development

Three to four exploration wells will be drilled in each of the prospects to prove steam. The exploration wells will be followed by drilling of appraisal wells after which a feasibility study will be carried out. Positive outcomes of the feasibility studies will lead to drilling of production wells. This segment of the project will be financed and undertaken by GDC using in-house capability. GDC will develop the steam and own the wells.

4.3 Power Plant Construction

The steam will be provided to independent power producers who will finance, build, own, operate and transfer the power plants for a predetermined period under the Build Own and Operate (BOO) structure. GDC will construct a network of steam gathering pipelines from the various wells that will deliver the steam to the power plants. IPPS will operate and maintain the power plants for 25 years.

4.4 Substation and Transmission

In order to evacuate the power, Kenya Electricity Transmission Company (KETRACO) will construct transmission lines. The power generated will be sold to the national offtaker, in this case Kenya Power& Lighting Company Limited. The power generator will therefore enter into a Power Purchase Agreement with the Offtaker.

4.5 Environmental Monitoring

GDC will be responsible for ensuring that proper environmental management practices are followed for sustainable development of geothermal resources. GDC has been carrying out environmental management and monitoring work in Drilling Projects since onset of geothermal drilling project and associated infrastructure as part of Environmental Management Plan (EMP) implementation. The environmental management and monitoring program undertaken include meteorological monitoring; precipitation/ rain chemistry monitoring; water and wastewater, vegetation and soil quality analysis; air quality and noise monitoring; rehabilitation of disturbed sites; soil conservation and solid waste management and rig hygiene. A tree nursery is also in place for raising tree seedlings for rehabilitation within the project and social afforestation program outside the project.

4.6 Update of Operational Performance

	PROJECT NAME	COST OF THE PROJECT (MUSD)	STATUS OF THE PROJECT	COMPLETION DATE
1.	460MW Menengai Geothermal Project	1800.00	• Drilling at the project is in progress with 5 rigs and 25 wells completed. Two more rigs are under commissioning. • Steam equivalent in excess of 130 MW has so far been realized. • Procurement of Independent Power Producers (IPP's) who will construct a power plant of 35MW each has been completed. • Project Implementation Steam Supply Agreement (PISSA) negotiations completed and signed between GDC and IPP's in October 2014 • Power Purchase Agreement negotiation between Kenya Power & Lighting Company and Independent Power Producers (IPP's) signed in October 2014 • The Independent Power Producers (IPP's) IPPs have commenced application of Generation Licenses • The Conditions Precedent to the Contract for both the PISSA and PPA are currently being addressed • The Contract for the construction of the Steam Gathering System was signed on January 10, 2014 and the Contractor has mobilized to the site and construction is already underway. The construction is expected to be completed by February 2015. • Tendering of Independent Power Producers (IPP's) who will generate total of 60MW is underway • Procurement for the other capacity plants are to be procured as drilling progresses	100MW - June 2015 60MW - December 2015 100MW - June 2016 200MW - December 2016

	PROJECT NAME	COST OF THE PROJECT (MUSD)	STATUS OF THE PROJECT	COMPLETION DATE
2.	200MW Baringo-Silali Geothermal Project	800	• Detailed Surface studies have been completed and the Environmental License obtained. • Community engagement framework has been established and Land – Approval by Baringo County Government has been obtained. • Infrastructure development commenced in January 2014 and Construction of the road network and the well pads is currently ongoing • Financing acquired from GRMF for drilling of 2 wells and associated Infrastructural development • Loan signed on July 10, 2014 with KfW for 100MUSD to finance infrastructure and drilling • Procurement for the drilling Services contractor has been completed and the contract expected to be signed by December 2014 • Procurement for the contractor who will construct the water supply system is at the evaluation stage and contract expected to be signed in December 2014 • Drilling expected to commence in March 2015 using five rigs • Procurement for the Independent Power Producers (IPP's) for the construction of power plants is expected to begin as drilling progresses.	100MW - June 2016 100MW - December 2016
3.	150MW Suswa Geothermal Project	600	• Detailed Surface studies were completed in 2013 and the project ESIA in progress. Community engagement framework was established in 2013. • Project financing to the tune of USD 200 Million to come from the India Exim Bank. Loan agreement scheduled to be signed within the third quarter of FY 2014/2015 • Drilling expected to commence in 2015 with the deployment of four rigs • Procurement for the Independent Power Producers (IPP's) for the construction of power plants is expected to begin as drilling progresses.	50MW - June 2016

5 PROJECT EXECUTION STATUS

a) Olkaria

The GDC drilling work was completed in 2014. KenGen has commissioned the 280 MW during the period of evaluation (July and December 2014). GDC will therefore continue to provide steam for generation.

b) Menengai

GDC has achieved the necessary steam for the first 105 MW project, under an engineering procurement and construction (EPC) contract, the Company is constructing the steam gathering network scheduled for completion in March 2015. In addition, the Company has finalized the agreements with three independent power producers and have handed the site to them for commencement of the power plant constructions. The Company continues to drill for steam for the additional 60 MW project and has shortlisted firms to build the power plants. GDC is currently finalizing the request for proposal.

c) Baringo-Silali 200 MW project

Within the period, the company obtained financing from KfW and had tendered for the drilling contract and water supply system. In addition, the firm also commenced construction of roads.

d) Suswa 150 MW Project

The Company has conceptualized the project and awaits financing to commence the necessary works.

6 CHALLENGES AND PROPOSED MITIGATION

i. Financial Challenges

Late disbursement of funds and late donor loan approvals from the Treasury affects the project execution schedule.

Mitigation
Focusing on developing an independent income stream and timely disbursement of funds from the Treasury. The company from this financial year will receive steam revenues from Olkaria.

ii. Drilling Challenges

Difficult drilling conditions initially lead to longer drilling period per-well at the exploration stage. However, the speed has improved with more knowledge of the field as more wells are drilled.

Mitigation
Combination of experience gained from the earlier drilled wells, timely supply of materials, the implementation of mitigative drilling practices, and periodic self-assessment is leading to improved drilling performance.

iii. Delivering within Project Schedule

The project schedules are developed and cascaded to implementing departments as performance targets. In addition, a project monitoring & reporting system has been put in place to track project execution and identify challenges & intervention measures. It is appreciated that Geothermal development is subject to a number of different uncertainties in terms of the formation which can affect drilling time and affect the planned project schedule.

Mitigation
Careful planning and by making realistic assumptions that allow for scheduling contingencies has been adopted.

iv) Human Capacity Development

Until 2009, the Country had only one rig and 37 geothermal experts all stationed at KenGen -Olkaria. With increase activities in both GDC and KenGen, a great need arose in the need for experts to manage the development.

Mitigation
GDC teamed with external training institutions to provide the necessary human resource capital development. This has lead to GDC running 7 and KenGen 3 rigs with a trained human resource capacity of over 300 trained scientist and engineers.

7 CONCLUSION / WAY FORWARD

GDC is meeting its mandate as envisioned in the sessional paper No. 4 of 2004. Accelerated funds disbursement is helping fast track project execution as demonstrated by the Menengai 105MW project. GDC has developed policies and procedures that are designed to provide management and staff with a defined framework for implementation of its strategic plan through effective business processes. GDC has developed geothermal development models that have attracted financial and investors. This is attested to by the commitment from financiers and quality and numbers of interested investors who participated in our project tenders. Since its inception in 2008, GDC has built its internal capacity and expanded its functions, and this has resulted in appropriate modifications to its structure and procedures. As it proceeds in its mission to explore, develop and operate Kenya's abundant geothermal resources, GDC will continue to evolve and adapt in every area of its business, with a consistent focus on providing clean, indigenous energy to the people of Kenya. GDC aims to build a foundation on which a robust geothermal industry will thrive.

Energy Regulatory Commission

July to December 2014

CONTENTS

> The Commission helped in the reduction of the Fuel Cost Charges and indeed the overall retail tariffs by ensuring that only prudently incurred costs are factored into pricing.

EXECUTIVE SUMMARY

During the first half of the year, the Energy Regulatory Commission implemented objectives and programmes outlined in the performance contract and the strategic plan. This included reduction in the number of days used to approve Power Purchase Agreement and licenses in the electric power and petroleum sectors. The Commission also helped in the reduction of the Fuel Cost Charges and indeed the overall retail tariffs by ensuring that only prudently incurred costs are factored into pricing. The Fuel Cost charges reduced by 60% from Ksh. 7.22/kWh in July 2014 to Ksh. 2.87/kWh in December 2014. For the first time, a wheeling agreement to help in power export to Rwanda was approved. In addition, a special street lighting tariff of Ksh. 4.36/kWh was also approved by the commission. Over the period under review, the aggregate percent reduction in the price of Diesel has been 24% that of Kerosene has been 23% while that of Super Petrol has been 22%. The disparity is as a result of some key factors which are explained in this brief. The Kenya audit office gave a clean bill of health to the Commission financial accounts.

INTRODUCTION

The energy sector is a key driver of economic growth and development of a country. It also plays a key role in improving the environment of doing business. In Kenya, the energy sector has been identified as a key enabler for realization of the Vision 2030 to transform Kenya into a middle-income economy. A lot has been initiated in the energy sector in the last ten years. The Government prepared and implemented the Sessional Paper No. 4 of 2004 on Energy and enacted the Energy Act No. 12 of 2006 that brought electricity, downstream petroleum and renewable energy sub sectors under a single regulator, the ERC.

Before the Jubilee Government came into power in March 2013, the country had an installed capacity of 1,586MW and 120MW of emergency power, which totaled to 1,716MW. Since then, Government has retired 90MW of the emergency power. Only 30MW of this capacity is remaining in the system to provide system stability in the western region.

MANDATE OF THE ENERGY REGULATORY COMMISSION

ERC's mandate encompasses, inter alia, the following: licensing and compliance enforcement, set, review and adjust electric power tariffs and tariff structures, approve electric power purchase and network service contracts, energy pricing, dispute resolution, energy planning, competition in the energy sector and protecting consumer interests.

FINANCIAL PERFORMANCE

ERC continues to manage its financial resources in a prudent way that is consistent and complies with the relevant legislations and government guidelines as evidenced by twelve consecutive clean (unqualified) audit reports.

The Commission expects to operate within the approved budget level in the 2014/15 financial year and so far has utilized 100% of available allocated funds.

OPERATIONAL PERFORMANCE

In the last six months, the Energy Regulatory Commission exceptionally exceeded performance targets set out in the performance contract and the strategic plan as well as the targets set out in the Medium Term Plan of the National Government. The Commission also played a key role to support the County Governments.

- The electricity supply industry in Kenya has witnessed significant gains since the launch of Project 5,000+MW of fast tracked capacity in September 2013. The first half of the financial year has witnessed declined in retail electricity tariffs.
- One of the key milestones achieved to date has been on the reduction of the Fuel Cost Charge, leading to a reduction in the overall retail electricity tariffs. As a result of this development, electricity bills have declined steadily in the period between July - November 2014. This was driven by a reduction in the fuel cost charges from KShs 7.22/kWh in July to KShs 3.47/kWh in November 2014, and a further decline of Ksh. 2.87/kWh in December 2014, a decrease of 60% within the last six months. This was a consequence of addition of new geothermal generation capacity and sustained dispatch of hydropower plants. On average, during the period, Domestic Customers' (DC) unit cost reduced by 26%, while Commercial/Industrial Customers (CI5) unit cost decreased by 27%, compared to the cost that applied in July 2014.
- The Commission approved a special street lighting tariff of Ksh. 4.36/kWh to be used implemented between 6.00pm to 6.00am. This is meant to promote a 24-hour economy in the Nairobi City County as well as other counties in the Country. The special tariff, which will improve street lighting penetration, will also help reduce crime in the towns.
- Nine Power Purchase Agreements (PPAs) were approved during the period July-December 2014 with a total capacity of 46 MW. This included 30MW power export to Rwanda. To enable the power export to Rwanda through Uganda, the Commission also approved a wheeling Agreement for the 30MW. All these new plants will use renewable energy technologies such as geothermal and hydropower technologies.
- As provided in the Energy Act, ERC coordinated the development and preparation of the rolling Least Cost Power Development Plan. The target for the year is to prepare a 20-year power master plan in conjunction with sector stakeholders for the period 2015-2035 incorporating Small Scale Renewable Energy sources and the project 5000+MW for the Least Cost Power Development Plan in June 2015. A draft interim has been prepared in conjunction with the consultant procured by the Ministry of Energy and Petroleum. The LCPDP team also attended the Generation candidate's assessment workshop on(1st and 2ndDecember 2014).The LCPDP team visited various generation projects between 8th and 20th of December 2014 and scheduled to visit transmission plants mid February 2015.

PPAs and License Approvals under Project 5,000+MW

Under project 5,000+MW, ERC received and approved a PPA and a Wheeling Agreement for power export to Rwanda in a record time of 25 days. The power to be exported in the PPA is 30MW for the first phase with an additional 20MW for the second phase. This is an initiative by the Government to create demand for the 5,000+MW, considering that excess capacity is already being felt in the system. A further capacity of 31.5MW was approved under the FiT policy from ten small renewable energy projects.

- In demand side management, the Commission is at the forefront to promote regional power trading. In this regard, it has approved a 30MW PPA and Wheeling Agreement for power export to Rwanda. In conjunction with sector stakeholders, a digital portal to register new capacity/demand by manufacturing firms was created. This is hosted in KPLC and can be accessed in all other energy utility websites.

In the Petroleum Sub Sector, the Commission

- Has implemented an online licensing system), which has ensured easier access to licensing services, by the public and fostered great efficiency in the processing of applications. The period of processing licences applications has reduced from an average of 30 days to 12 days.
- Has continued to regulate pump prices of key products namely AGO, PMS and IK with a view to ensuring

that distortions of pricing dynamics by oil marketing companies is contained and that only prudently incurred costs in the petroleum supply chain are passed onto the consumer. This has allowed pump prices to reduce with reducing international movements of refined petroleum products

- Continues to monitor the quality of petroleum products being consumed in the country through the fuel marking and monitoring program, which has ensured a marked reduction in motor fuels adulteration and export dumping. The current compliance level for the various petroleum retail dispensing stations in the country stands at 99%.
- Has enhanced infrastructural development, by licensing an additional 31,000M3 storage for petroleum products at Konza which will be a boost to the country's petroleum storage capacity and hence alleviate supply constraints. Two new LPG depots have been commissioned and licenced while several others are under construction.
- Continued to ensure that the petroleum infrastructure in the country meets the requisite standards by ensuring that all new petroleum facilities are vetted and issued with permits before commencement of construction works.
- Continued to publish petroleum pump prices for all the main towns in the country.

In the Electricity Subsector

- The Commission has continued to carry out technical audits of the licensees' operations and facilities aimed at improving service delivery to electricity consumers in the country. For a period of six months ending on 31st December 2014, the Commission carried out a total of 5 technical audits. Recommendations on areas of improvement were sent out to licencees. Once recommendations are implemented it is expected that there will be reduced power black outs, reduced electricity related accidents/incidences as well as improved power supply quality and reliability.
- In the same period the Commission licensed 4 companies to generate power and 1 company to generate, distribute and supply electricity. All the licensed companies generate from renewable energy sources. This was in line with the government's project 5000 + MW.
- The Commission continued to monitor transmission projects undertaken by KETRACO. Reports of the monitoring exercise were sent to the licensee.
- The Commission has continued to license electricians and electrical contractors to carry out electrical installation works for existing and new consumers of electricity in the country. This has improved the quality of electrical installations works in the country thus reducing electrical related accidents/incidences within the consumer premises. To date, the Commission has licensed 3,342 electricians and registered 1,129 electrical contractors.
- The Commission has set service delivery standards for Kenya Power and Lighting Company limited (KPLC) with regards to power quality, reliability and customer service. The parameters are continuously monitored and any deviations addressed immediately.
- The Commission has continued to provide an avenue for conflict management on any disputes between electricity consumers and the service providers within the sector, which has reduced consumer complaints through the public media

In the renewable energy sub sector, the Commission

- Developed a renewable energy portal, www.renewablenergy.go.ke, which is a one-stop shop on key information and opportunities in the renewable energy sector including licensing and related requirements.
- Adopted the Standardized Power Purchase Agreements for projects under Feed-in-Tariff Policy for projects below 10MW.
- Has licensed 14 Energy Audit Firms and 37 Energy Auditors, issued 9 licenses to Solar Water Heating Contractors and 31 to Solar Water Heating Technicians. During the same period, 180 licenses were issued to solar PV Contractors and 168 licenses to Solar PV Technicians.
- Has conducted 11 Energy Management Regulations compliance inspections, 5 Solar PV Regulations compliance inspections, and 5 Solar Water Heating compliance inspections.

Regulations

In the last six months, the Commission has prepared the following regulations, which will be operationalised once gazetted:

- The Energy (Electricity Tariffs) Regulations. The Energy (Electricity Regulatory Accounts) Regulations.
- Draft Energy (Appliances' Energy Performance and Labelling) Regulations. The regulations have been approved by the Commission.
- Draft Energy (Improved Biomass Cookstoves) Regulations. The regulations have been approved by the Commission.
- Draft Energy (Lubricants Facility Construction and Business Licensing) Regulations, 2013.
- Draft Energy (Minimum operational stocks and capacity sharing) Regulations, 2014.

- The Energy (Petroleum products quality management) Regulations, 2014.

CHALLENGES AND PROPOSED MITIGATION

The hydrology risk: the hydro risk due to reduced generation from the seven folks early in the year spilled to the new financial year. As a result, the fuel cost charges were recorded at Ksh. 7.22/kWh until September 2014 when they witnessed declines. In future, the sector should continue to diversify the generation mix and avoid situations that would delay the recovery of the true cost in the FCC.

Weak Exchange Rate: in the last six months, the Kenyan shilling continued to depreciate against the US Dollar and other major currencies. This acted against the benefits in FCC reduction as well as further pump price reductions. The Central Bank should manage the exchange rate in such a way that benefits in reduction of the international crude prices felt at the pump as well as in the FCC in paid in electricity consumption.

Delays in commissioning of projects: This led to higher FCC in the first quarter of 2014/15. Commission of power plants in town would ensure maximization of the generation mix to achieve the highest benefits in cost reductions.

FUTURE OUTLOOK

Going forward, the Commission is putting in place measures to regulate the energy sector in line with Vision 2030 and to ensure full implementation of project 5,000MW+ of fast tracked new capacity. Empasis will be put on the following issues:

- Approve all PPAs and licenses for electricity sub sector within 30 days instead of the statutory 90 days.
- Promote and monitor electricity power generation from the various technologies with a view to managing the fuel cost charges and other pass through costs to reduce electricity tariffs in the country
- Harmonise Commission operations in line with requirements of the Constitution and the relevant statutes.
- Maintain regulatory independence in the discharge its mandate and operations
- Continue to foster better regulations in the energy sector to ensure efficient service delivery and sustainable access to energy services.
- Working closely with the ministry of Energy and Petroleum to ensure better regulation of the energy sector in the country.
- Work closely with the National Treasury and the Public Private Partnership (PPP) Unit to promote public and private sector investment in provision of energy services in the Country.
- Promote regional power trading within the East African pool to generate demand and economic growth.

Kenya Electricity Transmission Company Limited
"Building a World Class National Grid"

KENYA ELECTRICITY TRANSMISSION COMPANY LTD.
July to December 2014

CONTENTS

> The Company envisages being a world-class electricity transmission company and the leading inter-connector in Africa.

1. BACKGROUND

Kenya Electricity Transmission Company Ltd. (KETRACO) was incorporated in December 2008 under the Company's Act, Cap 486 as a State Corporation pursuant to the Sessional Paper No. 4 of 2004 on Energy. The Mandate of the Company is to plan, design, construct, operate and maintain the National Electricity Transmission Grid and regional interconnectors. KETRACO is 100% Government owned and being a state corporation, it is regulated under the State Corporations Act, Cap 446.

The Company envisages being a world-class electricity transmission company and the leading inter-connector in Africa. Its mission therefore is, to build and operate a national electricity transmission network that is reliable, efficient, effective, safe and environment-friendly through innovative and best practices; and to promote regional power trade for socio-economic development.

2. OVERVIEW OF THE 6 MONTH OPERATING ENVIRONMENT

During the period under review, the Company operated in a favourable environment. It received continuous support from Government and development partners and it engaged with more project contractors, consultants and other stakeholders.

3. FINANCIAL PERFORMANCE

During the period under review, the total assets of the company were KES 55,277 Million, mainly driven by an increase in project costs and the acquisition of additional assets. The 2014/2015 projects budget for both local and external funding was KES 4, 350 Million and KES 18, 715 Million respectively.

4. PROJECTS EXECUTION STATUS

(A) Completed Electricity Transmission Lines

(a) 328km 220kV Rabai-Malindi-Garsen-Lamu. Line completed and energized up to Garsen sub-station. Due to the power demand in Lamu area, shunt reactors shall be installed and the whole line commissioned in June 2015.

(B) Construction of Electricity Transmission Lines

- Construction of the following transmission lines continued:

(i) 482km 220/400kV Mombasa-Nairobi Line:
- Lot 1 of the line (Rabai-Tsavo) completed
- Lot 2 (Tsavo-Embakasi) Tower erection and Conductor stringing is in progress.
- Lot 3 Rabai and Embakasi substations completed.
- Expected completion date: August 2015

(ii) 25 km 220kV Olkaria I – Suswa & 25 km 220kV Olkaria IV – Suswa:
- Line construction - tower foundations civil works, tower erection and conductor stringing are in progress. Line construction is at 96% completion.
- Construction of substations at Olkaria is complete.
- Expected completion date: March 2015

(iii) 100km 400kV Nairobi Ring: Suswa-Isinya
- Lines construction – tower erection and substations civil works are in progress.
- Suswa substation is complete.
- Expected completion date: March 2015

(iv) 354 km 132kV Kenya Electricity Expansion Programme (KEEP): Eldoret-Kitale, Kisii-Awendo and Kindaruma- Mwingi- Garissa Lines
- Lines construction and tower foundations civil works are in progress.
- Compensation for wayleaves is on-going.
- Expected completion date: June 2015

(v) 96Km 132kV Meru-Isiolo-Nanyuki:
- Line construction - tower foundations civil works, tower erection and stringing are in progress.
- Compensation for wayleaves is on-going.
- Expected completion date: August 2015.

(vi) 127 km 400kV Lessos-Tororo (Kenya-Uganda) interconnector

- EPC Contract awarded. Engineering designs and tower spotting commenced. Line engineering design is on-going at 75.6% and for Lessos Sub-station it is at 12%
- Line construction - tower foundations civil works are in progress
- Substation construction - civil and structural works are in progress.
- Compensation for wayleaves is on-going.
- Expected completion date: July 2015

(vii) 431Km 132kV Power Transmission Improvement Projects:

Nanyuki-Nyahururu; Lessos-Kabarnet; Olkaria-Narok; Mwingi-Kitui-Sultan Hamud-Wote; Bomet-Sotik; Ishiara-Kieni transmission lines and associated substations

- Sub-stations civil and structural works are on-going at 57.5% and construction of the line is also ongoing at 17.4%.
- Compensation for wayleaves is on-going.
- Expected completion date: September 2015.

(viii) 430 km 400kV Loiyangalani-Suswa transmission line

- Compensation for wayleaves is on-going
- Notice to proceed for the EPC contractor has been issued.
- Expected completion date: August 2016

(ix) 153km 132kV Machakos–Konza–Kajiado–Namanga single circuit line

- Substation civil and structural works and tower foundations construction are ongoing
- Compensation for wayleaves is on-going
- Expected completion date: November 2015

(x) 90km 220kV Turkwel -Ortum -Kitale single circuit Line

- Substation civil and structural works and tower foundations construction are ongoing
- Compensation for wayleaves is on-going
- Expected completion date: November 2015

(xi) 23km 220kV Menengai-Soilo

- Line design in progress and the Contractor has been asked to fastrack the project implementation
- ESIA license has been acquired
  Site selection and demarcation has beencarried out for Menengai and Soilo substations
- Valuation of land by an external valuer completed and forwarded to NLC through the Cabinet Secretary of Energy
- Expected completion date: June 2015

(C) Transmission Projects Preparation

The following transmission lines projects are under preparation:

a. 612km 500kV HVDC Ethiopia-Kenya Interconnector

- Compensation for wayleaves is on-going
- Consultant has been procured
- Procurement of EPC contractors is in progress.
- Expected completion date: June 2018

b. 300 km 400/220kV Olkaria-Lessos-Kisumu line

- Acquisition of way leaves is in progress. Contractor procured to value land and structures.
- Prequalification of EPC Contractors completed and a No Objection has been received from JICA and opening of financials will proceed.
- Expected completion date: December 2016

c. 100km 132kV Sondu-Homa Bay-Ndhiwa-Awendo transmission line

Cadastral data being picked by consultant.
Expected completion date: March 2017

d. 5000+MW Projects

(ii) 25km 400kV Menengai-Rongai

- ESIA and RAP study completed and under review.
- Line route selection complete
- Preparation of bid documents ongoing Seeking Financing

(iii)150km 400kV Silali-Rongai Line

- Line route selection complete
- Seeking Financing
- Full ESIA study is ongoing and RAP consultant has been procured, but the study has not commenced due to lack of funds

(iv) 50km 400kV Dongo Kundu-Mariakani

- Preparation of bid documents complete.
- Line route is also complete.
- RAP& ESIA ongoing & NEMA license
- The line will be built by the developer of the 700MW Liquified Natural Gas (LNG) power plant

(v) 520km 400kV Lamu- Kitui - Nairobi East Line

- Preparation of draft bidding documents complete. Line route complete.
- RAP& ESIA on going for acquisition of NEMA license.
- AfDB has indicated they will be financing the project

(vi)110km 400kV Isinya - Nairobi East Line

- Preparation of draft bidding documents complete. Line route complete.
- RAP& ESIA on going.
- Being financed by AfDB

(vii) Mariakani 400/220kV Substation

- Procurement of Contractor on going (Re-tendering).

(viii) Isinya 400/220kV Substation

- Construction commenced in September 2014.
- Expected completion date: December 2015

(D) Other Key Achievements

(I) Feasibility Studies Undertaken

- Feasibility studies for 22 new projects have been completed.

(Ii) Project EPC Tenders Awarded

- The Company awarded projects-related tenders: procurement of substations land, consultancy services

(Iii) Capacity Building And Performance Evaluation

- The Company recruited Graduate trainee engineers and trained different staff in different courses. The Company's 2013/2014 performance was successfully evaluated by the Government and was rated 'VERY GOOD'.

5. CHALLENGES AND PROPOSED MITIGATION

- The Company encountered the following challenges:
  - (i) Wayleaves acquisition issues;
  - (ii) Vandalism of transmission infrastructure;
  - (iii) Inadequate funds to finance 5000MW+ transmission projects;
  - (iv) Shortage of Transmission/Substation Engineers in the market;
  - (v) Slow processing of duty exemptions for contractors;

The following mitigation measures were applied:

- (i) Using the National Land Commission to issue public notice and gazette the affected parcels of land along the wayleave corridors;
- (ii) Collaboration with Kenya Forest Service, Kenya Wildlife Service and National Environmental Management Authority;
- (iii) Continuous public sensitization, engagement of community leaders, collaboration with local administration and improved compensation payment procedures;
- (iv) Use of modern survey technology for route selection;
- (v) Use of anti-theft bolts in tower erection;
- (vi) Requested Government for additional budget allocation;
- (vii) Disseminating projects information to prospective investors and development partners;
- (viii) Collaboration with National Treasury in processing of duty exemptions for contractors;
- (ix) Continuous capacity building for the staff;

6. CONCLUSION AND WAY FORWARD

The company has received continuous support from Government and development partners. The company will continue to engage with project contractors, consultants and other stakeholder to ensure timely implementation of the project.

Kenya Power

KENYA POWER & LIGHTING CO. LTD.

July to December 2014

CONTENTS

> Kenya Power is currently implementing strategies focused on operational change to meet the objectives of adequate, reliable and competitive electricity

1. INTRODUCTION

The Kenya Power and Lighting Company Ltd commenced operations as a power utility in 1922 as the East African Power and Lighting Co. Ltd. The company has the mandate to purchase bulk electricity supply, transmit, distribute and retail electricity to end use customers throughout Kenya. Its purpose, responsibilities and core functions as a commercial state corporation in Kenya are stated in its Vision and Mission Statements and are expressed in its relationships with other key players in the power sub-sector and in its contributions to the country's long term public energy policy and national development objectives.

Kenya Power is currently implementing strategies focused on operational change to meet the objectives of **adequate, reliable and competitive** electricity and which will also optimise the benefits from the new generation capacity being procured. As an effective partner in the country's national development agenda, the company's growth strategy aims to deliver electricity sub-sector projects identified for implementation under the Vision 2030 Economic Development Plan as well as projects that will deliver sufficient distribution capacity to absorb the 5,000+MW new generation planned by the Government for commissioning by 2017.

Mission Statement

Powering People for Better Lives

Vision Statement

To provide world class power that delights our customers.

Kenya Power technicians carry out extensive work on the power infrastructure in Nairobi West as part of Operation Boresha Stima Viwandani

2. EXECUTIVE SUMMARY

The Company continued to perform above target in respect to the key financial indicators but recorded mixed results with respect to operational indicators. Financial performance indicators that improved in the first six months of 2014/15 are Profit Before Tax, which was Kshs 5,310 million (3% above target) and Return on Investment, which was at 2.32% (3% above target). The annual target of paying Shs 500 million as Dividend to the Treasury was partially met in the second quarter when an interim dividend of Kshs 195.5 million was paid. A final dividend will be paid in February 2015.

Operational indicators which notably improved and performed better than target were Connection of New Customers and Generation Capacity Procured. A total of 214,377 new customers were connected in the first half of the year, which exceed the cumulative six performance target of 200,000 by 7%. This is largely attributable to continuation of the low standard Ksh 35,000 connection charge, the Last Mile Project and improved contractor mobilisation and performance.

Generation Capacity Procured was at 310MW by the end of the second quarter, which was 79% of the annual target of 393MW and was on course for the annual target to be achieved.

Operational indicators that were below target included:

i. Primary Schools Connected to Electricity, as reflected by results from REA.
ii. Expand and Upgrade Electricity Distribution Network, which reflects the slower than expected pace of new high and medium voltage power line construction.
iii. Number of New Distribution Substations completed, which reflects the delay in completion of some substation projects.

iv. System Efficiency, which is reflective of higher growth in the low voltage network as compared to the medium and high voltage networks.
v. Sales, due to lowered consumption growth in some customer segments.
vi. Average Industrial Retail Tariff, which is due to delayed commissioning of the less costly new geothermal generation.
vii. Average Outage Repair Time (CAIDI), which is marginally below a much more stringent target as compared to past years.
viii. Number of Low Voltage Breakdowns per 1,000 customers per month, which is mainly as a result of better data capture on outage incidents
ix. Ease of Doing Business - Average Time to Connect New Business Customers After Submission of All Documents, which is affected by shortage of meters arising from connection of large numbers of new customers.

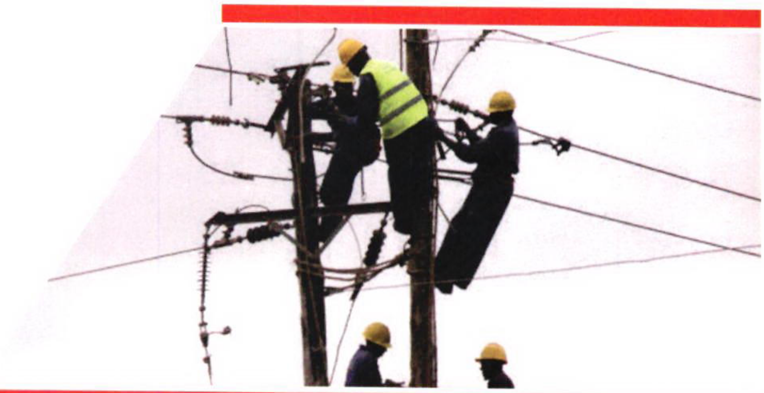
Project Execution Status

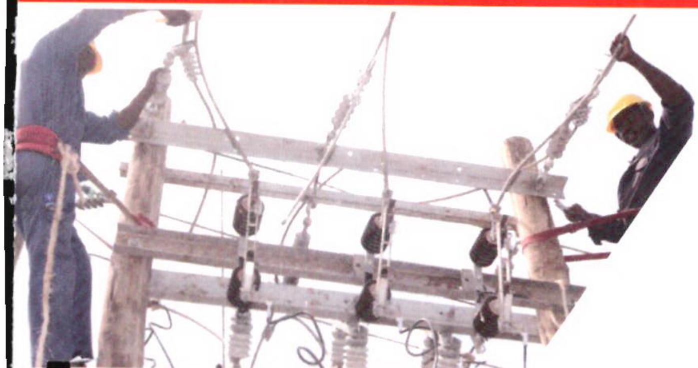
The major company project being tracked in the Performance Contract for 2014/15 is the Kenya Energy Expansion Project (KEEP). The project group entails construction of 53 new primary distribution substations and associated feeder lines around the country and 3 new transmission lines. The total contract cost of the project group is US$ 152 million. Within 2014/15 this project entails completion of 31 new substations and associated power lines. The overall project completion level is 56%.

3. FINANCIAL PERFORMANCE

Profit Before Tax

Profit Before Tax as at November 2014 was Kshs 5,310 million, which was 42% above the cumulative performance target of Ksh 3,750 million and 156% above KShs 2,072 million reported for the same period in the previous financial year. The above target PBT is mainly attributable to improving operational efficiency and higher than expected increase in electricity revenue a result of a more favourable unit yield arising from changes in the customer sales mix. Miscellaneous revenue was also higher than expected. The rise in PBT over the previous year is mainly attributable to the tariff adjustment that came in to effect as from December 2013, which was occasioned by the need for the company to meet revenue requirements of the new IPP and KenGen generation plants that were commissioned in the years 2013 and 2014.





Return on Investment

The Return On Investment is represented by the cumulative Net Profit Before Tax divided by the Total Assets. The cumulative result at November 2014 was 2.32% as compared to which was above the cumulative target of 2.25% and significantly above the result of 1.18% in the same period in the previous financial year. The result was above target due to comparatively higher growth in Profit Before Tax As compared to Total Assets. The low percentage value of this indicator is due to the large scale of investment in fixed assets as compared to profit.

Dividend to National Treasury

An annual target of Kshs 500 million was set in regard to the Dividend to be paid by the company to the Treasury in 2014/15. In December 2014 an Interim Dividend was paid to Government shareholding in the company amounting to Kshs 195.5 million. A final dividend will be paid in February 2015.

4. OPERATIONAL PERFORMANCE

x. Primary Schools Connected to Electricity

The number of primary schools connected to electricity by the end of November 2014 was 713, which was below the cumulative target of 2,500, a variance of negative 71%. For this indicator Kenya Power relies on connectivity construction work to be carried out by the Rural Electrification Authority after which the company does the metering and customer account opening.

xi. Number of New Customers Connected

In the six months period from 1st July 2013 to 31st December 2014 a total of 214,377 new customers were connected, which was above the half year target of 200,000 by 7% and above the achievement of 147,212 over the same period in the previous year by 46%. Despite the rise in connection costs that has occurred, the company has still maintained this indicator on an accelerated growth trend. Factors contributing to this included increased availability of loans to prospective customers, launch of the Last Mile Connectivity project to meet a significant share of the reticulation cost and continued quotation of the old connection rates for new customers whose connection cost is below shs 135,000.

xii. Expand and Upgrade Electricity Distribution Network

The length of new high and medium voltage power lines (HV and MV) constructed by the company during the six month period from July to December 2014 was 1,126 kms as compared to a target of 1,600kms, a variance of negative 30%. This growth is associated with customer connectivity growth and timing of project completion, which was slower than expected.

xiii. Number of New Distribution Substations completed

The number of new substations completed in 2014/15 as at 31st December 2014 was 5 as compared to a cumulative target of 9. It is expected that the annual target of 20 will be achieved as most of the Kenya Electricity Expansion Project (KEEP) substations are scheduled to be completed in the third and fourth quarters.

xiv. Generation capacity procured

The Company has an annual target of connecting 393.4MW of electricity from new generation plants during 2014/15. By the end of December 2014 the company had started receiving generation from 310.4 MW of new plant as shown in the following table. The company remains on course to achieve this target by the end of the financial year.

Project	Type	Target New Capacity (MW)	Est. Commissioning Date	Actual New Generation in 2014/15 to date	Actual Commissioning Date
KENGEN:					
Ngong phase II	Wind	13.6	Jul-2014	13.6	Nov 14
Ngong 1 phase II	Wind	6.8	Jul-2014	6.8	Nov 14
Olkaria IV unit two	Geothermal	70	Jul-2014	70	Aug 14
Olkaria 1 -Unit 4	Geothermal	70	Jul-2014	70	Oct 14
Olkaria 1 -Unit 5	Geothermal	70	Aug-2014	70	Oct 14
Sub-total		**230.4**			
IPPs:					
Athi River 1 Triumph	Diesel	80	Jun-2014		
Athi River 2 Gulf	Diesel	83	Jun-2014	80	Oct 14
Sub-total		163			
Total MW		**393.4**		**310.4**	

See also Appendix A Kenya Power 5000+MW IPP Generation Projects (Gantt Chart).

xv. Project sub-indicators

Completion Rate

This indicator for Kenya Power in 2014/15, measures the completion rate for the Kenya Electricity Expansion Project (KEEP), which is a group of 53 new substations and associated power lines being constructed across the country. This major distribution upgrade and expansion project serves the objectives of increasing access to electricity, improving reliability and reducing technical power losses. The overall completion rate for the KEEP project was 56% in the second quarter of 2014/15. Details are shown under section 5 below under Projects Execution Status.

Cost Efficiency

Cost Efficiency for projects remains at 100% as all projects are implemented within their respective budgets and contract values.

xvi. System Efficiency

System Efficiency in 2014/15 to date, which is electricity that is sold to final consumers as a percentage of energy purchased from generating companies was 79.24%. This compared to a cumulative target of 81.16%, a variance of negative 2%. This result reflects a slight worsening to the 80.68% at the same time in the previous year. Mismatched timing of new power stations and transmission line developments contributed to higher than expected transmission losses in the past two years. Construction of the new higher capacity transmission line between Nairobi and Mombasa is ongoing, which will reduce transmission losses when complete. Connection of a large number of new customers at low voltage especially in rural areas where line distances in between substations are long is also creating tendency for technical losses to rise. New substation and other network upgrading projects have had notable benefits in reducing system technical losses. Commercial losses (especially from power theft) continue to be addressed by widespread inspection of power supply installations.

xvii. Sales

Sales for 2014/15 to date was 3,232.9 GWh as compared to a target of 3,070.5GWh, a variance of negative 5%. This result compares to 2,964 GWh at the same in the previous year reflecting a growth rate of 4%. Sales growth is tracking below target due to lower growth in large power consumption as compared to the previous year and to some power rationing that has occurred in Nairobi and West Kenya due to low voltages. However, sales is expected to pick up with expected economic growth, the rise in new customer and as a result of the Boresha Stima Viwandani maintenance programme which will enable industrial customers to switch off their generators due to more reliable power.

xviii. Average Industrial Retail Tariff

Average Industrial Retail Tariff by the end of November 2014 was equivalent to US cents 16 per kWh which was worse than the target of US cents 14 per kWh, but was on an improving monthly trend. The below target performance was due to the later than expected commissioning of the new geothermal generation plant that was to displace expensive thermal generation.

xix. Average Domestic Retail Tariff

Average Domestic Retail Tariff by the end of November 2014 was on target at US cents 19 per kWh. The improved performance was due to lowered fuel cost surcharge following a drop in fuel prices and displacement of thermal generation by the new geothermal plant.

xx. Average Outage Repair Time (CAIDI)

Average Outage Repair Time was below target in December 2014 at 3.96 hours as compared to a target of 2.35 hours. Performance of this indicator, however, compares very favourably to previous years when it averaged over fours hours. Emphasis is now being given to sustained supervision, analysis of data and accountability from staff in charge of feeders.

xxi. Number of Low Voltage Breakdowns per 1,000 customers per month

The Average Number of Low Voltage Breakdowns per 1,000 customers per month at 9.82 was worse than cumulative target of 8.45 but was gradually improving in the first half of 2014/15 following implementation of the Boresha Stima Viwandani intensive maintenance program by the company. This effort is being accompanied by an initiative to construct dedicated lines initially to 200 large power customers so that the redundancy created will eliminate power interruptions to them. The worse than target results is mainly a reflection of better data capture on incidences as well as inclusion of data on interruptions not caused by faults in the KPLC system. This indicator has been affected by transformer vandalism, oil siphoning, shortage of 33kV cables and stay wire. Enhanced LV maintenance to address faults in the LV network includes availing transformers and cables and reinforcement to repetitive cases.

xxii. Ease of Doing Business

Average Time to Connect New Business Customers After Submission of All Documents

Average Time to Connect New Business Customers in the second quarter of 2014/15 was 51 days as compared to a target of 37 days. This indicator has been affected by insufficient materials, particularly meters, needed to meet growing demand from rising new customer connection applications. Contractors are to be supervised to finish started projects.

In order to improve the ease of doing business, the company carried out business segmentation and adopted new connection timelines of 30 days for large customers over 25KVA and 43 days for ordinary customer below 25kVA.

5. PROJECTS EXECUTION STATUS (KEY PROJECTS BEING UNDERTAKEN BY YOUR ENTITY AND A STATUS UPDATE ON THE SAME)

KENYA ELECTRICITY EXPANSION PROJECT

Status of Contracts under the Project as at 30th November, 2014

Contract Name	Contract Signature	Commencement Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Completion date	Status (Percentage completion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
Kindaruma-Mwingi-Garissa Line	April 4th, 2012	July 1, 2012	Aug 2012	Mar, 2015	53.7%	14,308,673.80	7,692,528.61	-Foundation Cast:- 495No out of 692 -Tower Erection:-388No
Eldoret-Kitale Line	April 4th, 2012	July 1, 2012	Aug 2012	Mar, 2015	55.5%	4,402,595.10	2,441,908.83	- Foundation Cast:- 193No out of 200 - Tower Erection-159
Kisii-Awendo Line	April 4th, 2012	July 1, 2012	Aug 2012	Mar, 2015	61.8%	2,580,815.60	1,595,847.59	- Foundation Cast.- 92No out of 138 - Tower Erection-60No.
Kindaruma s/s	April 4th, 2012	July 1, 2012	Nov 2013	Mar, 2015	51%	11,224,084.2	8,772,551.24	- S/s earthworks level 2 ongoing. - Control building Excavations complete - Equipment foundations, control building concreting, equipment support structure erection ongoing - Fencing done.
Mwingi s/s	April 4th, 2012	July 1, 2012	Nov 2013	Mar, 2015	64%			- Equipment foundations & erection, cable trench & gantry erection completed
								- Equipment stringing, road, drainage & fencing ongoing. - 98% of Control room works done. - 96% Earthing works done
Garissa s/s	April 4th, 2012	July 1, 2012	Mar 2014	Mar, 2015	52%			- Cut and fill (s/s platform) completed. - Equipment foundation, control room, cable trench & boundary wall works ongoing.

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
Kitale & Eldoret s/s	April 4th, 2012	July 1, 2012	Aug 2012	Mar, 2015	30%	5,116,603.00	1,125,568.39	- Kitale: Equipment foundations complete, - Control room 90%, cable trench and s/s boundary wall in-progress - Eldoret: Line bay equipment foundations completed. - Erection of structures at 22%
Awendo & Kisii s/s	April 4th, 2012	July 1, 2012	Nov 2015	Jun, 2015	15%	10,221,840.10	1,533,276.02	- Kisii: Line bay Earthworks in-progress - Awendo: S/s platform works ongoing
Design & supervision Services	April 4th, 2012	May 23, 2011	N/A	Jun, 2015	50.3%	4,779,817	2,407,922.97	- Approval of designs in Progress and site works supervision on-going.
Component C: Distribution								
a) Upgrading of substations and power lines.								
- Supply of conductors, cables & cable accessories	Dec 23, 2011	Dec 23, 2011	N/A	Sept , 2012	100%	4,445,500	4,445,500	All Quantities delivered.
- Supply of various 66kV, 33kV, & 11kV line construction material	Dec 23, 2011	Dec 23, 2011	N/A	Sept , 2012	100%	1,914,875	1,914,875	All Quantities delivered.
- Supply of Isolators, Insulators & Surge Arrestors for 66kV, 33kV, & 11kV lines	Dec 23, 2011	Dec 23, 2011	N/A	Sept , 2012	100%	2,592,698	2,592,698	All Quantities delivered.

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Supply of Concrete Poles		Dec 23, 2011	N/A	Sept 2014	10%	8,758,904.25	943,443.64	- Manufacturing& Delivery – 72% complete
b) EPC for Construction Of 66/11 kV substations In Nairobi Region- Lot 1					**42%**	**20,895,779.00**	**8,982,188.23**	
- Githunguri,	Jun 14th 2012,	Sept 10th , 2012	Nov 2012	Nov 2014	75%			- Equipment procurement and delivery 85% - Civil works - 82% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 25%
- Villa Franca,	Jun 14th 2012,	Sept 10th , 2012	Nov 2012	Nov 2014	82%			- Equipment procurement and delivery 85% - Civil works - 96% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 30%
- Magumu,	Jun 14th 2012,	Sept 10th , 2012	Nov 2012	Nov 2014	72%			- Equipment procurement and delivery - 85% - Civil works - 97% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 35%
- Uplands,	Jun 14th 2012,	Sept 10th , 2012	Nov 2012	Nov 2014	66%			- Equipment procurement and delivery 85% - Civil works - 48% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%

Contract Name	Contract Signature	Commencement Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Completion date	Status (Percentage completion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Rironi,	Jun 14th 2012,	Sept 10th , 2012	Dec 2012	Dec 2014	77%			- Equipment procurement and delivery 85% - Civil works - 88% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 30%
- Lower Kabete,	Jun 14th 2012,	Sept 10th , 2012	Feb 2013	Feb 2015	72%			- Equipment procurement and delivery 85% - Civil works - 65% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 25%
- Lukenya,	Jun 14th 2012,	Sept10th , 2012	Feb 2013	Feb 2015	60%			- Equipment procurement and delivery 85% - Civil works - 20% - - Installation and commissioning – 0%
- Dagoretti	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Mar 2015	60%			- Equipment procurement and delivery - 85% - Civil works - 24% - Installation and commissioning – 0%
- Kirigiti	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Mar 2015	60%			- Equipment procurement and delivery -85% - Civil works - 15% - Earth works in-progress. - Installation and commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
c) EPC for Construction Of 33/11 kV Substations In West Kenya Region-Lot 2					**37%**	**10,275,037.80**	**3,715,975.24**	
-Kabarak,	Jun 14th 2012,	Sept10th , 2012	Mar 2013	Mar 2015	68%			- Equipment procurement and delivery 85% - Civil works - 72% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 0%
- Chepsion,	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Mar 2015	68%			- Equipment procurement and delivery 85% - Civil works - 72% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 0%
- Ahero,	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Mar 2015	64%			- Equipment procurement and delivery 85% - Civil works - 60% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%
- Kibos	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Mar 2015	64%			- Equipment procurement and delivery 85% - Civil works - 55% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Majengo,	Jun 14th 2012,	Sept 10th , 2012	Jan 2014	Mar 2015	65%			- Equipment procurement and delivery 85% - Civil works - 60% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%
- Maseno,	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	Apr 2015	68%			- Equipment procurement and delivery 85% - Civil works - 70% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 0%Civil works
- Elgon View	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	May 2015	68%			- Equipment procurement and delivery 85% - Civil works - 75% - Equipment foundations complete, and boundary wall complete, Control Room in-progress - Installation and commissioning – 0%
- Kipsarman	Jun 14th 2012,	Sept 10th , 2012	Mar 2013	May 2015	60%			- Equipment procurement and delivery - 85% - Civil works - 65% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
d) EPC for Construction Of 33/11 kV Substations In Mt Kenya – Lot 3					**38%**	**8,559,804.20**	**3,278,354.35**	
- Juja,	Jun 29th 2012	Sept 10th , 2012	Mar 2013	Mar 2015	74%			- Equipment procurement and delivery - 85% - Civil works - 92% - Equipment foundations complete, Control Room and boundary wall in-progress - Installation and commissioning – 50%
- Kangema,	Jun 29th 2012	Sept 10th , 2012	Mar 2013	Mar 2015	70%			- Equipment procurement and delivery -85% - Civil works 87% - Equipment foundations completed, Control Room and boundary wall in-progress - Installation and commissioning – 18%
- Mwea	Jun 29th 2012	Sept 10th , 2012	June 2013	June 2015	62%			- Equipment procurement and delivery -85% - Civil works - 85% - Equipment foundations, Control Room and boundary wall in-progress - Installation and commissioning – 0%
- Tala	Jun 29th 2012	Sept 10th , 2012	Mar 2013	Mar 2015	70%			- Equipment procurement and delivery -85% - Civil works - 95% - Equipment foundations and Control Room roofing in-progress , boundary wall complete - Installation and commissioning – 48%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Gatundu.	Jun 29th 2012	Sept 10th '2012	Mar 2013	Sep 2015	52%			- Equipment procurement and delivery -85% - Civil works - 27% - Earthworks complete, equipment foundations in-progress. - Installation and commissioning – 0%
e) EPC for Construction of 132/33/11 kV substations In Coast Region – Lot 4					50%	6,185,347	3,132,577.03	
- Jomvu	31st Aug 2012	Nov 1st 2012	Nov 2012	Nov 2014	61%			- Equipment procurement and delivery 87% - Civil works - 75% - leveling and back filling ongoing. Installation and commissioning – 0% - Leveling and backfilling on-going.
- Mishomoroni	31st Aug 2012	Nov 1st 2012	Oct 2013	Jun 2015	60%			- Equipment procurement and delivery 87% - Civil works -45% - Earth works in-progress. - Installation and commissioning – 0%
a) EPC for construction of 66kV, 33kV and 11kV lines in Nairobi & Coast Regions– Lot 1					**45%**	**8,440,759.35**	**3,829,023.02**	
- Githunguri,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	65%			- Equipment procurement and delivery 100% - 66kV line civil works 80% - 11kV line civil works 10% - 66kV line Installation 30% - 11kV line Installation 15% - Commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Villa Franca,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	47%			- Equipment procurement and delivery 100% - 66kV line civil works 40% - 11kV line civil works 0% - 66kV line Installation 30% -11kV line Installation 0% - Commissioning – 0%
- Magumu,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	65%			- Equipment procurement and delivery 100% - 33kV line civil works 85% - 11kV line civil works 30% - 33kV line Installation 55% - 11kV line Installation 10% Commissioning – 0%
- Uplands,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	65%			- Equipment procurement and delivery 100% - 66kV line civil works 90% - 11kV line civil works 0% - 66kV line Installation 50% - 11kV line Installation 15% - Commissioning – 0%
- Rironi,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	47%			- Equipment procurement and delivery 100% - 66kV line civil works 70% - 11kV line civil works 20% - 66kV line Installation 45% - 11kV line Installation 10% - Commissioning – 0%
- Lower Kabete,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	70%			- Equipment procurement and delivery 100% - 66kV line civil works 80% - 11kV line civil works 85% - 66kV line Installation 65% - 11kV line Installation – 75% - Commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Lukenya,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	36%			- Equipment procurement and delivery 100% - 66kV line civil works 0% - 11kV line civil works 0% - 66kV line Installation 0% - 11kV line Installation 0% - Commissioning – 0%
- Dagoretti,	July 27 2012	Nov 5th 2012	Sept 2013 -	Oct 2014	22%			- Equipment procurement and delivery 100% - 66kV line civil works 0% - 11kV line civil works 0% - 66kV line Installation 0% - 11kV line Installation 0% - Commissioning – 0%
- Kirigiti,	July 27 2012	Nov 5th 2012	Oct 2013	Oct 2014	21%			- Equipment procurement and delivery 100% - 66kV line civil works 0% - 11kV line civil works 0% - 66kV line Installation 0% - 11kV line Installation 0% - Commissioning – 0%
- Mishomoroni	July 27 2012	Nov 5th 2012	Oct 2013	Oct 2014	45%			- Equipment procurement and delivery 100% - 33kV line civil works 45% - 11kV line civil works 0% - 33kV line Installation 0% - 11kV line Installation 0% - Commissioning 0%
- Jomvu.	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	55%			- Equipment procurement and delivery 100% - 33kV line civil works 25% - 33kV line Installation 0% - Commissioning 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
g) EPC for construction of 33 & 11kV lines in West Kenya region – Lot 2					**52.2%**	**4,646,208.32**	**2,427,069.71**	
- Kabarak,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	45%			- Equipment procurement and delivery 100% - 33kV line Civil works 45% - 11kV line Civil works 0% - 33kV line Installation 15% - 11kV line Installation 0% - Commissioning – 0%
- Chepsion	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	19%			- Equipment procurement and delivery 100% - 33kV line Civil works 0% - 11kV line Civil works 0% - 33kV line Installation 0% - 11kV line Installation 0% - Commissioning 0% Wayleave acquisition in progress.
- Ahero,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	85%			- Equipment procurement and delivery 100% - 33kV line Civil works 100% - 11kV line Civil works 100% - 33kV line Installation 95% - 11kV line Installation 85% - Commissioning 0%
- Kibos,	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	75%			- Equipment procurement and delivery 100% - 33kV line Civil works 100% - 11kV line Civil works 70% - 33kV line Installation 85% - 11kV line Installation 55% - Commissioning 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Majengo	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	19%			- Equipment procurement and delivery 100% - 33kV line Civil works 0% - 11kV line Civil works 0% - 33kV line Installation 0% - 11kV line Installation 0% - Commissioning 0%
- Maseno	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	65%			- Equipment procurement and delivery 100% - 33kV line Civil works100% - 11kV line Civil works 70% - 33kV line Installation 85% - 11kV line Installation 40% - Commissioning – 0%
- Elgon View	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	50%			- Equipment procurement and delivery 100% - 33kV line Civil works 60% - 11kV line Civil works 65% - 33kV line Installation 45% - 11kV line Installation 55% - Commissioning – 0%
- Kipsarman	July 27 2012	Nov 5th 2012	Jan 2013	Oct 2014	20%			- Equipment procurement and delivery 50% - 33kV line Civil works 20% - 11kV line Civil works 0% - 33kV line Installation 0% - 11kV line Installation 0% - Commissioning 0% Contractor in the process of procuring wooden poles

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
h) EPC for construction of 33 & 11kV Lines in Mt. Kenya region – Lot 3					**57.3%**	**4,869,185.48**	**2,788,662.00**	
- Juja,	July 27 2012	Nov 1st 2012	Feb 2013	Oct 2014	65%			- Equipment procurement and delivery 100% - 66kV line Civil works 60% - 11kV line Civil works 0% - 66kV line Installation 40% - 11kV line Installation 0% - Commissioning 0%
- Kangema	July 27 2012	Nov 5th 2012	Feb 2013	Oct 2014	70%			- Equipment procurement and delivery 100% - 33kV Civil works 100% - 11kV Civil works 20% - 33kV line Installation 70% - 11kV line Installation 0% - Commissioning 0%
- Mwea	July 27 2012	Nov 5th 2012	June 2013	Oct 2014	50%			- Equipment procurement and delivery 100% - 33kV line Civil works 100% - 11kV line civil works 20% - 33kV line Installation 42% - 11kV line Installation 0% - Commissioning 0%
- Tala	July 27 2012	Nov 5th 2012	Feb 2013	Oct 2014	75%			- Equipment procurement and delivery 100% - 66kV line civil works 100% - 11kV line civil works 0% - 66kV line Installation 70% - 11kV line Installation 0% - Commissioning – 0%

Contract Name	Contract Signature	Com-mence-ment Date	Site Hand over date (C/W NEMA License & change of user)	Forecast Comple-tion date	Status (Per-centage com-pletion)	Contract amount (US$ Equivalent)	Amount paid as of 30th Nov, 2014	Notes
- Gatundu.	July 27 2012	Nov 5th 2012	Sept 2013	Oct 2014	47%			- Equipment procurement and delivery 100% - 33kV line civil works 20% - 11kV line civil works 0% - 33kV line Installation 5% - 11kV line Installation 0% - Commissioning 0%
1) Pre-payment meters.	31st Aug 2012	Nov 5th 2012	N/A	Sept 2014	100%	6,657,400	6,657,300.00	Complete
2) Distribution Supervision support services	31st Aug 2012	Nov 5th 2012	N/A	July 2016	70%	1,184,449	1,409,124.17	- Approving Designs as submitted - Site supervision in-progress.
3) Slum Electrification	31st Aug 2012	31st Aug 2012	N/A	June 2014	38%	10,000,000	3,768,600	16,404 meters installed.
4) GPOBA: IVA - Services	31st Aug 2012	31st Aug 2012	N/A	June 2014	26%	73,205	24,889.87	- Six verification done for a total of 16,404 meters.
5) Risk Analysis and management study;	Not Yet	Not Yet	N/A	Not yet	0%	Nil	Nil	- No Objection obtained and KPLC has commenced negotiations with 2nd ranked consultant M/S PwC.
6) Revolving Fund						Funds On-Lent to KPLC: Ksh: 705,828,000. Amount Disbursed: Ksh 2,443,069,700.27 Amount Collected: Ksh 807,080,000.00 Defaulters (Connected Customers): Ksh 174,700,000.00 Total Funds available: ksh 38,640,000.00		- Total Applicants: 53,836 - Customers Connected: 52,593 - Customers Pending Connection: 1,243 - Defaulting Customers: 18,499

	Challenges	Proposed Mitigation
1	Unaffordability of connection cost by new ordinary customers	• Loan facilities for customers • Support from GOK to meet connectivity costs • Review costs to increase efficiencies • Pre-investment
2	Weak scrap metal law	• Government to be lobbied to strengthen scrap metal law to effectively deter vandalism
3	Drought induced power rationing	• Diversification of energy sources. • Interconnection of the national grid with neighbouring countries • Discovery and development of new energy sources in the country
4	Uncoordinated development planning (esp. cabling) with other utilities	• Improved consultation and coordination between infrastructural developers including water and telecommunications
5	Levies demanded by various Government entities for power infrastructure leading to debt conflicts. May also lead to higher tariffs.	• Intervention by Central Government to resolve disputes, set relevant policy and harmonise relevant laws
6	Delays in implementation of generation projects leading to continued suppressed demand and dampened sales Government delay in providing guarantees required for implementing generation projects.	• Continued temporary use of emergency generation. • Raise generation reserve margin requirement from 15% to 30% provide future cushion for project delays. • Demand Side Management and Energy Efficiency programs to substitute for new plant. • Government to establish a policy and legal framework for provision of government support and securities for project implementation
7	Right of Way for power lines, (wayleaves acquisition, encroachment, trace clearance)	• Public Education • Engaging Government, County and other public bodies • Intensified trace maintenance • Linking transmission line development to new generation plant development
8	High levels of vandalism and theft of power assets	• Intensify anti-vandalism security measures. • Ensure enforcement of new stiff penalties. • Engage communities in anti-vandalism efforts. • Engage authorities • Step up prosecution of vandalism cases

7 CONCLUSION/WAY FORWARD

The priority strategic initiatives of the company are as follows:

- Continue with construction of 31 remaining new KEEP funded substation projects scheduled to be completed in 2015/16.
- Extend automation of the distribution Network
- Increase redundancy and dedicated lines to Large Power customers so as to eliminate power outages affecting them
- Update and implementation of the Distribution Master Plan
- Prepare distribution network expansion plans in accordance with county structure
- Enhance anti-vandalism technical and legal interventions
- Sustain ambitious new customer connectivity targets so that as many as 1 million new customers can be connected per year
- Sales growth has to be raised to 15% annually to absorb the 5000+MW generation expansion.
- Fast Track Regional interconnection (Kenya Ethiopia, Kenya Tanzania and second Kenya Uganda links)
- Structured procurement of 5,093 MW by 2017 out of which 631.4MW has already been completed between July 2013 and December 2014 and for which 2,435MW is already committed to be built.

Although a very ambitious and costly power network infrastructural investment programme is being implemented to serve the aims of the Vision 2030 Medium Term Plan, it is noted that this programme has attracted keen attention from lenders, led by the World Bank, who are financing the majority of these projects to fruition.

Reasons for optimism of continued sales growth in the plan period include growth of the economy, massive infrastructural investment in the country, a vibrant domestic private sector and growing foreign direct investment in to the country.

The Company remains keenly aware that it provides an essential service as an input in productive activity and residential life in the modernising economy and as such recognises customer satisfaction as a core objective.

RURAL ELECTRIFICATION AUTHORITY

July to December 2014

CONTENTS

1 INTRODUCTION

The target for REA in both the 201 3/14 and 2014/15 FY is to supply electricity/connect all the un-electrified primary schools as a necessary infrastructure for the class one laptop implementation programme. There are a total of 21,228 public primary schools to be supplied with electricity in readiness for the programme.

2. OPERATIONAL PERFORMANCE: PROJECTS EXECUTION STATUS AS AT 31st DECEMBER 2014

The status of implementation of the primary schools as of 31st December 20 14 is as follows;

	CATEGORY OF PRIMARY SCHOOL	No.	Remarks
1	Total Number of Public Primary Schools	21,228	
2	Number of Public Primary Schools with Electricity	15,912	
3	Number of Public Primary Schools in progress	3,486	
	- To be implemented through Solar	1,861	Construction to be completed by mid-February 2015
	- To be implemented through Grid	1,625	Construction to be completed by 28th February 2015
4	Number of Public Pri-mary Schools in design	1,830	Design to be completed by 31st January 2015 Construction to completed by 30th April 2015

3. CHALLENGES ENCOUNTERED IN PROJECTS IMPLEMENA TION AND PROPOSED MITIGATION

a) **Funding** - Although the Government has continued to provide funds for the Rural Electrification Programme over the years, the funds are hardly enough to implement the construction of all identified priority projects in each financial year.

b) **Delay in delivery of materials due to long lead time;** hence delay in project implementation and commissioning e.g. shortage of 33KV transformers has caused delays in commissioning of projects.

Solution: Source for sufficient funds to enable bulk and timely procurement of materials and

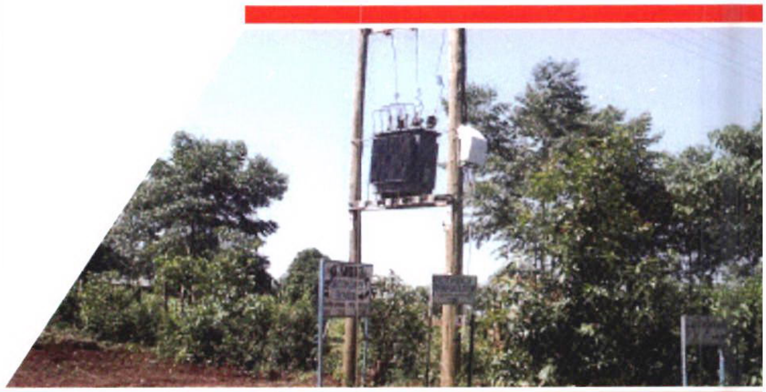
- Promotion of locally manufactured materials.

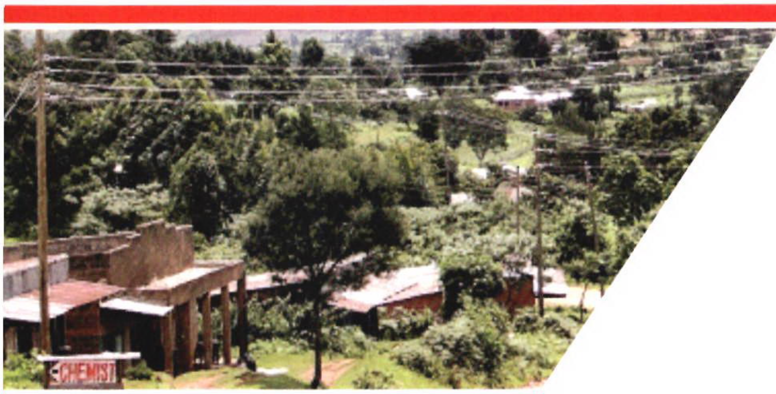
c) **Wayleaves acquisition:** delays in acquisitions of consent and huge compensation required to pay for way leave.

Solution: Involvement of communities, local leaders

4. CONCLUSION

REA is committed to ensuring that the target of having all the public primary schools in the country connected/supplied with electricity is achieved by the end of July 2015, as per the Jubilee Government manifesto.





NATIONAL OIL CORPORATION OF KENYA

July to December 2014

CONTENTS

National Oil

The Corporation entered into various partnerships with leading international service companies to position Kenya as a base for the provision of upstream support services for East Africa's burgeoning oil and gas sector.

1 INTRODUCTION

The National Oil Corporation of Kenya is a limited company incorporated by the Government of Kenya in April 1981 under the Companies Act, Cap 486 of the Laws of Kenya. At its formation, the Corporation was charged with participation in all aspects of the petroleum industry. The company is 100% owned by the Government of Kenya through the Ministry of Energy and Petroleum and the National Treasury.

The formation of National Oil Corporation was precipitated by the oil crisis of the 1970's (1973/74 and 1979/80) and the corresponding supply disruptions and price hikes. This necessitated the need for the Government to have greater control of this crucial factor of the economy's performance by having a company, which would act as an instrument of government policy in oil matters.

The Corporation became operational in 1984 with initial activities mainly consisting of exploration activities delegated from the Ministry of Energy. In March 1988, the need for the company to enter into downstream activities (petroleum importation and distribution) was identified. National Oil has since grown to be among the leading oil companies in Kenya with a rapidly expanding retail network and growing its presence in petroleum midstream while building a strong upstream presence to be among Africa's foremost fully integrated national oil companies.

2 EXECUTIVE SUMMARY

The period July-December 2014 saw continued activity in the oil and gas exploration front with Tullow and Africa Oil engaged in activities to further derisk the Lokichar sub basin while also opening up the Kerio sub basin. Tullow also continued with studies that are expected to inform the field development plans for Blocks 10BB and 13T. Africa Oil also recorded a gas discovery in Block 9 from the Sala well. The Ministry of Energy and Petroleum also awarded the tender for the feasibility study and pre-FEED for the Hoima-Lokichar-Lamu crude oil pipeline.

On the petroleum downstream front, ERC continued to post lower recommended petroleum prices on the back of declining international oil prices which have fallen from US$ 111.65 per barrel in the July to US$ 55 per barrel in December 2014.

During this first half of 2014/15, National Oil continued to fulfill and surpass the signed work obligations under its Petroleum sharing Contract (PSC) for Block 14T acquiring and interpreting 310 line KM of 2D seismic. The Corporation also scaled up community engagements including partnering with the Magadi Soda Foundation to undertake various programmes for the communities within the Magadi area. During the same period, the Corporation also entered into various partnerships with leading international service companies to position Kenya as a base for the provision of upstream support services for East Africa's burgeoning oil and gas sector.

The Corporation also floated the tender for the engagement of a transaction advisor for the Mombasa offshore petroleum jetty and tank farm project which is aimed at helping to position the Kenyan coast as a regional and ultimately global petroleum trading and logistics hub.

3 FINANCIAL AND OPERATIONAL PERFORMANCE

During the period July to October 2014, the Corporation recorded improved performance compared to previous year same period. We are confident to surpass the performance of previous year. Table 1 and 2 below captures the financial highlights and key KPI compared to same period previous year.

Item Description	FY 2013/14 YTD OCT 2013	FY 2014/15 YTD OCT 2014
Turnover (Kshs '000)	7,456,692,012	7,959,145,540
Other Income (Kshs '000)	25,217	29,281
Gross Profit (Kshs '000)	456,824	503,169
Profit Before Tax	24,987	35,186
Upstream Data Sales (Kshs '000) (Jul-Dec 2014)		165,000

Table 2: Key Operational Indicators

Item Description	FY 2013/14 YTD OCT 2013	FY 2014/15 YTD
OCT 2014	7,456,692,012	7,959,145,540
Sales Volumes (M3)	120,954	126,852
Nairobi National Terminal Throughput Volumes (M3)	98,525	87,196
Number of Retail Stations	89	97
Upstream Data Sales (Kshs '000) (Jul-Dec 2014)		165,000

4 PROJECTS UPDATE

4.1 Upstream Projects

4.1.1 Multiclient Seismic Data Acquisition

The Corporation in partnership with Schlumberger WesternGeco interpreted 9,000 line KM of offshore multiclient 2D seismic data acquired in the previous Financial Year. This data is set to help to further enhance the prospectiveness of offshore Kenya for oil and gas exploration activities.

4.1.2 National Data Centre

During the period under review the corporation in partnership with Schlumberger WesternGeco upgraded the National Data Centre to a web-based system. The Corporation also uploaded all physical files on the system and conducted training for staff charged with maning the data centre. The Corporation also commenced acquisition of software and hardware for the establishment of a seismic processing centre which will provide services to upstream companies operating locally and within the region.

4.1.3 Geochemical Laboratory

In line with the objective of setting up a world class geochemical services laboratory at the new Energy Center, the Corporation completed the feasibility study on geochemical and petro physical laboratory joint venture, identified a strategic partner and drafted a partnership MOU. Subsequently, memorandum and articles of association on JV shall be drafted based on the MOU by the parties. The Corporation has also commenced initial equipment procurement for the geochemical laboratory

4.1.4 Block 14T Work Programme

National Oil is the PSC licensee and operator of Block 14T. During the period under review, the Corporation undertook processing and interpretation of the 310 line KM of 2D seismic data acquired during the last half of the previous financial year. The Corporation has in the meantime commenced EIA to inform acquisition of the second phase of 2D seismic acquisition

The Corporation has also commenced Simultaneous Joint Inversion (SJI) aimed at integrating and interpretation the MT, FTG and Seismic data that has been acquired to date. Subsequently the Corporation will undertake further 2D seismic acquisition in quarter four of Financial Year 2014/15.

The Corporation has also scaled up its community engagements including partnering with the Magadi Soda Foundation to effectively undertake CSR activities within Block 14T.

4.1.5 Onshore Drilling Company

With the current developments in oil and gas sector in Kenya and East African region, it is projected that within the next 4-5 years, an upward of 100 onshore oil and gas wells may be drilled. This presents an enormous opportunity to set up a locally based drilling service entity that can provide the service across the region with the aim of reducing the prohibitive mobilization costs as well as daily hire rates which ultimately go into the cost recovery of the exploration companies and lead to reduced government profit take.

The Corporation has therefore identified and is pursuing a strategic partnership to establish a drilling services unit. The following has been accomplished during the period under review:

- Feasibility study on onshore drilling joint venture was completed.
- An international drilling contractor has been identified to form the National Oil drilling joint venture.
- Subsequently an MOU has been signed between National Oil and the strategic partner with the memorandum and articles of association for the JV also having been prepared.

4.1.6 Capacity Building

During the period under review, the Corporation sent 34 Management Trainees for various postgraduate programmes in oil and gas in leading universities globally as the Corporation seeks to build capability in readiness for production.

The Corporation has also entered into an MOU with Strathmore University for the roll out of joint professional/ executive short courses in oil and gas aimed at creating awareness and capacity on oil and gas for senior and mid-level professionals in both the public and private sectors. .

4.1.7 Government Participation Interest

The Corporation is the Government's nominee to exercise the Government's back-in participation interest in the blocks where commercial oil and gas resources have been discovered.

During the period under review, the Corporation undertook in house financing studies with a view to identifying alternatives for financing of the back in interest for Blocks 10BB and 13T. The Corporation has also commenced preliminary discussions with Tullow with full commercial discussions between National Oil and Tullow set to commence in February 2014. These discussions will lead to the investment plan and commercial agreements.

4.2 Midstream Projects

4.2.1 Petroleum Offshore Jetty and Tankfarm Project

The objective of this project is to build sufficient petroleum loading and offloading as well as storage capacity to help position the Kenyan coast as a regional petroleum trading logistics hub.

During the period under review, the Corporation undertook tendering for the engagement of a PPP transaction advisor for the project which is among the 47 projects that have been prioritized by the National Treasury for implementation under the Public Private Partnership (PPP) model. The transaction advisor is expected to be on board by the end of February 2015 and will subsequently guide the Corporation in the engagement of a project partner.

4.3 Downstream Projects

4.3.1 Enhancing LPG Access in the Country

To ease the constraints currently being faced by the country in the availability of LPG storage and filling infrastructure, the Corporation completed and commenced operations of the new Nairobi National Terminal LPG storage and filling plant within the period under review period. The plant has a storage capacity of 130MT and in addition to serving the Corporation it will also provide hospitality to other LPG players thus serving to enhance the penetration of LPG in the country.

The Nairobi National Terminal LPG filling and storage plant is set to be officially launched in January by His Excellency the President of Kenya Uhuru Kenyatta.

The Corporation is also working on installing 3 mobile LPG mini storage and filling (skid) units, with one already installed in Thika awaiting licensing and sites for the other two units identified in Kisumu and Eldoret.

4.3.2 Retail Expansion

As a measure to increase security of supply and cushion the public against supply shocks, National Oil is working on enhancing its national footprint of stations by an additional 17 stations during this Financial Year 2014/15. This will enable the Corporation to have a retail presence in every county headquarter in Kenya as well as in rural market centers and smaller towns across the country.

During the period under review, the Corporation brought onboard an additional four (4) stations in Cheptiret (Eldoret), Dillarline (Mulot), Isinya and Chogoria.

Plans are underway for an additional 12 stations with tenders awarded and constructions commenced for a number of these stations.

To enhance service offering at its outlets as well as diversify revenues, the Corporation is also undertaking development of alternative business sites on an initial six retail outlets.

5 OTHERS INITIATIVES

5.1.1 Strategic Partnership with Indian Oil Corporation Ltd

Following extensive research, study tours and benchmarking tours conducted by National Oil on the capabilities and business practices of leading national oil companies globally, the Corporation identified Indian Oil Corporation Ltd (Indian Oil) as a potential partner in enhancing the National Oil footprint and products portfolio in petroleum downstream as well as the Corporation's foray into petroleum midstream. Indian Oil Corporation is one of the three national oil companies owned by the Government of India and is a Fortune 500 Global company with a turnover in 2013 of USD 65B. It is also the single largest business entity in India.

The Corporation has subsequently entered into a Memorandum of Understanding (MoU) with Indian Oil which was signed on 18th December 2014 focusing on mutual cooperation along the entire value chain of the petroleum industry, including but not limited to, oil and gas exploration and production, refining, transportation, supply and retailing between the Parties in Kenya, India and mutually identified third countries. The MOU also covers facilitation of capacity building by Indian Oil through specialized training to personnel of NOC at various training centres/locations of Indian Oil.

5.1.2 National Oil Foundation

The Corporation set up the National Oil Foundation which is set to be officially launched on 14th January 2015 by the Minister for Transport and Infrastructure. The foundation has been established in recognition of the need to scale up the existing corporate social responsibility (CSR) initiatives by the Corporation. The foundation will act as the institutional home for the Corporation's social initiatives and interventions. The Foundation will among other focus on road safety awareness, environment and capacity building in oil and gas.

5.1.3 Kenya Petroleum Technical Assistance Project (KEPTAP)

The period under review saw the official launch of the Kenya Petroleum Technical Assistance Project (KEPTAP) by the Ministry of Energy and Petroleum and the World Bank. The aim of the project is to build the required capacity to enable the country to effectively manage the petroleum resources.

National Oil is among the beneficiaries of this project and has already identified areas for support under the KEPTAP project and is in the process of developing the required tender documentation for submission to the World Bank.

6. CHALLENGES

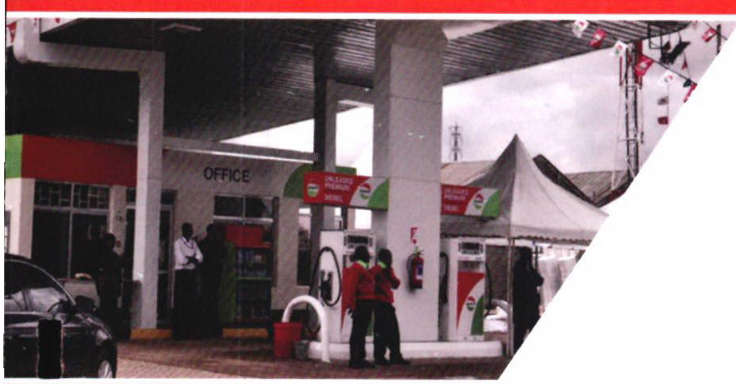
While the above achievements have been realised, a number of challenges have been encountered. Key among these challenges are highlighted below.

a. Inadequate Financing

Petroleum business is highly capital intensive and while National Oil has an aggressive growth plan, the company remains largely undercapitalized with total assets of Kshs 8B. This has continued to hamper the ability of the company to grow faster.

Mitigation

Moving forward, there may be need for the Government to consider injecting additional capital into National Oil and/ or other forms of support (through for example allocation of land for infrastructure projects, letters of comfort or guarantees to financiers and partners where applicable) to enable the company obtain more competitive financing hence achieve faster growth and participate in high capital petroleum infrastructure projects.



b. Constrained and Aged National Petroleum Distribution Infrastructure

The existing petroleum infrastructure in the country is aged and limited in capacity thus necessitating the need for the same to be shared among the over 60 registered oil marketing companies operating in Kenya on the basis of historical sales data/market share. This has posed operational and logistical challenges to National Oil which has been on a steep growth trajectory as allocation of space (ullage) in the existing facilities using historical sales trends does not take immediate cognizance of the expanded network.

Mitigation

The Ministry of Energy and Petroleum is currently spearheading the development of a master plan for the modernization of the national petroleum infrastructure with a view to only address the present constraints, but also develop infrastructure to support the oil and gas discoveries in Kenya and East Africa with a view to positioning Kenya as a regional petroleum trading logistics hub.

c. Petroleum Supply

Importation of petroleum to the country is wholly through spot arrangements which can predispose the country to supply shocks and often results in price volatilities. Best practice worldwide for net petroleum importers is to provide for a mix of spot purchases and term contracts.

Mitigation

There is need therefore to facilitate the National Oil Corporation of Kenya to enter into term contracts with producing national oil companies under government-to-government contracts particularly under the 30% quota with a view to ensuring stability in the supply of petroleum into the country.

d. Public Procurement Process

As a state corporation, National Oil is subject to the Public Procurement and Disposal Act. However as a commercial entity in a fully competitive environment and mandated to play a pivotal role in securing petroleum supply in the country, the lengthy procurement process often hampers speed of execution. In addition it is anticipated that as Kenya records more oil discoveries and moves into production, working within the provisions of the current Public Procurement and Disposal Act will be an impediment to National Oil further entrenching itself in the upstream field.

Mitigation

Developing or newly developed countries such as India, China, Malaysia, Brazil among others that have spurred their national oil companies to become global players have sought to provide special dispensations that have saved their NOCs from the rigors of the public procurement laws but at the same time providing appropriate safeguards that ensure these NOCs still remain accountable to the government and the public.

e. Inadequate Technical Skills

The country lacks adequate skills in the technical areas of oil and gas upstream and midstream. These skills will be critical if National Oil is to effectively play its role as a fully integrated company and for the Government to pursue an effective local content policy for the emerging oil and gas upstream and midstream functions.

Mitigation

In this respect there will be need for a grand marshal plan as done in Trinidad & Tobago, Brazil, Malaysia among others to build local competencies in these areas with National Oil working with other stakeholders to drive this agenda.

7. NEXT STEPS AND CONCLUSION

The Corporation continues to implement its 2013-16 Strategic Plan which aims to lay a robust foundation for a world class fully integrated national oil company of the future. In line with this, during the second half of the financial year we shall continue to implement the various projects highlighted above while also actualizing a number of strategic partnerships that were commenced in the period July-December 2014. We are also working on the 15 year transformation plan.

During the period January-June 2015, the Corporation will also commence partnership discussions with Tullow as the Corporation works towards exercising the state participation interest in Blocks 10BB and 13T.

We in National Oil are cognizant of the critical role of national oil companies in the realization of national development agendas. This is more so in the emerging economies of Asia, Africa and South America where national oil companies are now one of the most important tools of economic transformation. National Oil is working to support realization of the various national development objectives as espoused in the Vision 2030 and Jubilee Manifesto.

KNEB
KENYA NUCLEAR ELECTRICITY BOARD

KENYA NUCLEAR ELECTRICITY BOARD

July to December 2014

CONTENTS

KNEB

During the Quarter under review the board achieved 5% out the 25% target by identifying masters programmes for sponsorship and developing work plan

1 INTRODUCTION

The Government established the Nuclear Electricity Project Committee (NEPC) through gazette notice no. 14188 on 19th November 2010. In November 2012, NEPC was transformed into the Kenya Nuclear Electricity Board (KNEB). The mandate of the Board is to spearhead and fast track development of nuclear energy for electricity generation to realize Kenya's Vision 2030. Nuclear has the potential to provide secure base load electricity over a long period given the nature of its technological capabil

2 EXECUTIVE SUMMARY

The establishment of a nuclear power programme in the country is a critical step towards future energy security. Nuclear power is expected to make a significant contribution towards prospective power requirements in the future energy mix.

The Government set up the Kenya Nuclear Electricity Board (KNEB) as the country's Nuclear Energy Programme Implementing Organization (NEPIO) tasked with defining, coordinating and implementing Kenya's Nuclear Power Programme. KNEB is also tasked with the development of a comprehensive legal and regulatory framework for nuclear energy use in Kenya. KNEB has assessed the viability of Kenya's nuclear power programme through a Pre-feasibility Study (PFS).

The PFS identified the following areas as the pillar for the implementation of the Nuclear Power Program among the 19 Infrastructure Issues to be addressed;

i) Grid
ii) Site and Supporting Facilities
iii) Human and Institutional Capacity Building
iv) Stakeholder Engagement and Public Acceptance

The Board has embarked on the Grid Study in accordance with the recommendations of the PFS. Similarly, the Board has continued with the capacity building and stakeholder engagement initiatives. The Board however has not been able to commence detailed site analysis of the 10 potential sites which were identified during the PFS. Towards human resource development, the Board secured 2 PhD Scholarships at Texas A & M University through the sponsorship of the U.S government and International Atomic Energy Agency (IAEA) under the Peaceful Uses Initiatives (PUI) program. Similarly the Board secured 5 scholarships at KEPCO International Graduate School (KINGS) in South Korea for Masters in Nuclear Engineering and six Kenyans have since graduated from the same institution

3. OPERATIONAL PERFORMANCE

Carry out a Grid Study

The aim of this Technical Evaluation (TE) of the Kenya electric grid is to accentuate the core requirement of an electric grid that will safely, efficiently and reliably support the operation of a Nuclear Power Plant (NPP) in Kenya.

The Board procured a consultant and the grid study has already commenced.

Develop the national policy and strategy on nuclear safety

The Board has constituted an internal technical working group which has developed a concept document that comprises background information defining the rationale for developing a national policy and strategy for nuclear safety. The document outlines the elements of a national policy and strategy for safety, which will define the terms of reference for the technical working group.

Develop the National Policy and Strategy for the Management of the Nuclear Power programme

The Board has commenced various activities, which will culminate in a National Strategy & Policy for the Management of the Nuclear Power Program. In the Quarter, the Board outlined the contents of a Management Strategy & Policy and worked on developing the reports, which will be the basis of the Policy. The Board commenced a research on the following issues, which will be used to advise Policy Development in the subsequent Quarters:

1. A Justification of the Nuclear Power Programme in Kenya which will describe reasons why Kenya needs a Nuclear Power Programme,
2. The Technical Constraints and Risks involved in transitioning toNuclear Power
3. The possible organizations involved in the Nuclear Power Programme and their Management Structures, and
4. Possible Ownership and Contractual/Financing approaches for the Nuclear Power Plants.

Commence the development of requisite human and institutional capacity for nuclear power plant procurement

A draft position paper on the need for a procurement set up within the owner/operator distinct from the national public procurement setup has been prepared. The paper identifies crucial and distinct elements in nuclear procurement and gives justification to special conditions of nuclear procurement. The paper highlights the unique requirements of a nuclear power plant procurement process.

The Board has commenced the training and induction of manpower in nuclear procurement. Six (6) members from KNEB attended training at Texas A&M University, United States of America in July 2014 on nuclear power procurement, with special consideration on procurement needs, design specifications, standards and contract conditions for nuclear power plants. The training was done as part of capacity building on aspects of nuclear procurement.

Continue with the establishment of the legal and regulatory framework for Kenya's Nuclear Power Programme

During the contract period the Board has committed to continue with the development of the following four aspects: the legislative framework by further developing the National Nuclear Regulatory Bill; the National Nuclear Energy Policy; the accession to Treaties; and the establishment of a Nuclear Regulatory Body.

Legislative framework by further developing the National Nuclear Regulatory Bill

During quarter 1 and 2, the Board continued with the development of the third draft of the National Nuclear Regulatory Bill.

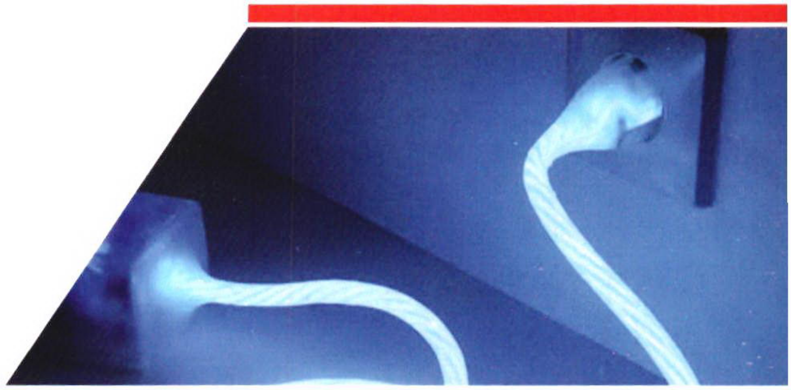
A team of consultants reviewed the draft Bill and considered the feedback provided by the International Atomic Energy Agency's (IAEA) Office of Legal Affairs during the 1st IAEA Legislative Assistance Mission held in the third quarter of the FY2013/2014

Continue with the development of a National Nuclear Energy Policy

During the quarter 1 and 2, the Board targeted to achieve a target of 5% by preparing a Request for Proposal for consultancy services to assist with the preparation of the National Nuclear Energy Policy.

It is intended that the Technical Working Group on Law and Policy (established under the Inter-Ministerial Committee on Nuclear Law and Policy) will be working with the consultant to be procured to continue with the development of the zero draft National Nuclear Energy Policy developed in the third quarter of the FY 2013/2014.

Toward this end, a draft Request for Proposal (RFP) has been prepared and is awaiting approval by the Board prior to the prospective consultants being invited to submit their proposal(s).



KNEB

Continue the Accession to Treaties.

During quarter 1 and 2, the Board continued with the process of ascending to relevant international nuclear instruments.

During the quarter under review, the Board commenced with the preparatory activities for an IAEA scientific visit on nuclear conventions scheduled to take place in Vienna, Austria in the second quarter. The purpose of the visit is to understand the working processes of the IAEA and emphasize the importance of ratifying key conventions in order for Kenya to be a part of the global nuclear safety regime.

Continue with the Establishment of a Nuclear Regulatory Body

During quarter 1 and 2, the Board, in joint sponsorship with the IAEA and the Nuclear Power Institute at Texas A&M University (TAMU), trained individuals from July 7 to July 25 2014. The training focused on key issues related to nuclear project procurement and nuclear regulatory matters and drew from a cross-section of participants from the Board, the Kenya Electricity Generating Company (KENGEN) and the Kenya Power and Lighting Company respectively.

Develop a comprehensive human resource development strategy for the nuclear power programme and continue with capacity building programmes.

During FY 2014/2015 the Board commits to Developing a Comprehensive Strategy for Human Resource Development aimed at achieving a knowledgeable and skilled workforce necessary for Kenya's nuclear power programme from pre-project phase to the decommissioning phase. This will entail;

1. Evaluating the Human Resources needs of Kenya's Nuclear Power programme as per the pre-feasibility study report
2. Developing capacity of the local group members on Human Resource Development
3. Constituting HRD working committee
4. Developing strategy on HRD (IAEA recommended methodology)
5. Presenting of strategy document to the Management
6. Holding integrated nuclear infrastructure review mission from the IAEA
7. Presenting the document to the board for approval.
8. Sponsoring at least 3 students for masters and 2 students for PHD programme

During the Quarter under review the board achieved 5% out the 25% target by identifying masters programmes for sponsorship and developing work plan however the target could not be fully achieved as evaluation of Human Resources needs for Kenya's Nuclear Power programme as per the pre-feasibility study report,

Undertake public/stakeholder education, consultation and Involvement for a Nuclear Electricity generation program

During Q1 and Q2 KNEB held a County Stakeholders Forum in Kisumu. KNEB also took part in the Agricultural Society of Kenya shows in Kisumu (July 2014) and Mombasa (August 2014). A call for submission of articles for KNEB's inaugural quarterly magazine was also issued. During Q2, KNEB further continued with development of Information, Education and Communication materials for stakeholders and the public by way of brochures and fliers.

Development of a national positionfor Kenya's nuclear power programme

During Q1 and Q2, KNEB, in collaboration with the Ministry of Energy and Petroleum and other parastatals in the sector sensitized, informed and consulted MPs on Kenya's nuclear power programme by organizing a retreat in Mombasa between 12-14 September 2014 for members of the Departmental Committee on Energy, Communications and Information of the National Assembly. During Q2, KNEB formally submitted the prefeasibility study report prepared by its Technical Affairs Directorate to the Cabinet Secretary for Energy and Petroleum.

Develop KNEB Nuclear Resource and Documentation Centre

During Q1 and Q2, braille materials were developed for use in the KNEB Resource and Documentation Centre. These materials are geared for the benefit of the blind.

4. CHALLENGES AND PROPOSED MITIGATION

The Board is facing constrained budgetary allocation which has hampered the implementation of the PFS recommendations in the areas indicated

i) Detailed Site Study which requires Kshs 1.3 Billion
ii) Legislation for Nuclear Law which requires Kshs 120 Million
iii) Stakeholder and Public Acceptance campaigns which requires Kshs 300Million
iv) Human and Institutional Capacity Building which requires Kshs 500 Million per year

5. CONCLUSION

The Board therefore requests the exchequer through the Ministry of Energy & Petroleum to kindly consider and scale up its budgetary allocation upwards from the current Kshs 300 Million to Kshs 3.2 Billion per year due to increased activities.

NOTES

www.energy.go.ke