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The

GRID

The Kenya Electricity Transmission Company Newsletter

**KETRACO launches landmark
Loiyangalani – Suswa project**

**KETRACO Sponsors Golf
Tournament
To Foster Team Spirit**

**Know your Manager
Reginah's success story**



From Lake Turkana Wind Power Plant site in Marsabit, the 400kV Loiyangalani - Suswa Transmission Project passes through the valleys, hills, desert and rivers to fulfill KETRACO's mandate to plan, design, construct, own, operate and maintain high voltage electricity transmission grid and regional power inter-connectors. This section at Suguta Valley has unique history.



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The Suswa - Isinya transmission line's special tower (6B/1).



A product of



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Editor's note



We welcome you to the eighth edition of our official quarterly journal, The Grid. As promised, we have embarked on an arrangement to cover the various issues so as to be up-to-date and frequent with our publications.

In this issue we report appointment of Board of Directors and do welcome them to The Kenya Electricity Transmission Company with open arms.

We bring to you exciting, in-depth and incisive stories we have gathered over the months. We bring you the story of one of our key projects. The Loiyangalani-Suswa Transmission Line Project, that was commissioned officially by H.E. The President at Sarima in Marsabit County and its projected impact to the energy sector and Kenyan economy in general.

Again, we take you through our inaugural KETRACO Annual Research Conference that would cement the need to enhance efficiency, reliability and expansion of knowledge in Electricity Transmission in Kenya.

The rapid response to deadlines as witnessed in completion and energization of Wote Substation in Makueni County where our chairman Hon. Eng. James Rege's official commitment to a deadline was attained. Wayleaves acquisition procedures, grievance redress mechanisms and informative features on various aspects of electricity, health, environment, safety and sports are well covered here.

We have introduced a new and authoritative page "Know Your Manager" which tries to demystify our officers in top management positions and open up channels to communicate organizational needs, oversee employees' performance, provide guidance, support, identify development needs, and manage the reciprocal relationship between staff and the organization so that each is successful.

Our Ag. General Manager, Human Resource and Administration, Ms. Reginah Kemboi, graciously accepted to be the first manager to be covered in this highly coveted forum. Her career path and experience should be an inspiring testimony to young upcoming employees. Other managers would henceforth follow in successive editions of your favorite staff magazine.

Our dedicated editorial team do anticipate at least some feedback from you. Let us know what you enjoyed reading and what did not interest you in this edition. Also tell us what you would want to see featured, and more importantly, share with us your stories.

We would be glad to feature your adventures,

Raphael Mworia
 Editor

PRESIDENT COMMISSIONS HISTORIC 400KV 435KM PROJECT

LOIYANGALANI-SUSWA TRANSMISSION PROJECT LAUNCHED IN COLOURFUL CEREMONY AT SARIMA

By Jack Nduri

President Uhuru Kenyatta officially commissioned the 400kV 435km Loiyangalani-Suswa high voltage electricity transmission line on 19th July, 2019, injecting additional 310MW of clean, green energy into the national grid. The double circuit 1,200 megawatt capacity line constructed by Kenya's official transmission infrastructure operator - Kenya Electricity Transmission Company (KETRACO) evacuates the electricity generated at the Lake Turkana Wind Power Plant, rated Africa's largest wind farm, to Suswa where it is injected into the national grid.

Since joining the grid, the wind power project has saved Kenyans more than Shs 8 billion from reduced usage of the expensive diesel-generated thermal power.

Over the same period, the plant injected more than 1.2 billion kilowatt-hours (KWh) of electricity.

The President, speaking at the event also attended by Deputy President William Ruto, said the commissioning of the project was a proud moment for Kenya. "With this monumental feat, as Kenya scores another first in Africa, I challenge all Kenyans to remain, resilient builders who build best when called upon to build greatly," the president said.

Kenya is one of the countries leading globally in the development of renewable energy especially in the geothermal sector.

The President, who made an extensive tour of the expansive plant, said the government has stepped up efforts to encourage development of wind farms and other renewable green sources of electricity, by both KenGen and the private sector.

Kenya's installed power capacity has increased from 1,768 MW in March 2013 to the current 2,712 MW, with the Lake Turkana Wind, Garissa Solar Power (54 MW) and Ngong Wind Plants (26 MW) joining the grid within the last year.

The president noted that the commissioning of the project was a testament of Kenya's commitment to pursue clean sources of energy.

It is also a major boost to the country's international commitments to lower greenhouse gas emissions.



H.E. President Kenyatta, CGH reads a plaque after officially cutting the tape during the Loiyangalani-Suswa Transmission project commissioning



The President signing a visitors' book at Loiyangalani substation when he commissioned the 400kV 435Km Loiyangalani-Suswa Transmission project. KETRACO MD, FCPA Fernandes Barasa, OGW is 3rd on his left while Deputy President H.E. Hon. Dr. William Ruto, EGH is on the extreme right.

According to data from The Ministry of Energy, the country's reliance on diesel power has reduced to 14% from 50%. In addition, the transmission line will boost communication in Northern Kenya since it carries fibre optic cable for the entire length of the line

The President said globally, Kenya is celebrated as one of the leading countries in the world with an energy mix of over 85 per cent from renewable sources especially from geothermal, a technology in which the country has become a continental center of excellence.

"The successful implementation of Lake Turkana Wind Power demonstrates Kenya's outstanding credentials as an investment

destination in Africa and is a perfect example of the immense potential of the public private partnership model of implementing development projects," said the President.

He said Kenya's progress in renewable energy will ensure the country's scenic beauty and unique ecosystems are preserved and protected for both present and future generations.

He said the successful completion and operation of the project is a testimony of the vital role played by collaboration between the public and private sectors in the development of the country.

“I invite other investors, not only within the energy sector but across the full spectrum of the economy, to join hands with government in conceptualizing and delivering transformative projects that secure measurable returns for our people as well as the investors,” the president said.

Dr. Ruto said the success of the project was a result of unity and commitment of all stakeholders who included host communities, various development partners and the private sector.

He thanked the President for personally taking charge in ensuring the project which consists of 365 turbines each with a capacity to generate 850 kilowatts of power was successfully executed.



H.E. President Kenyatta is being received by Lands Cabinet Secretary Ms. Farida Karoney, EGH at Loiyangalani substation. With him (left) is Energy CS, Hon. Charles Keter, EGH.

Energy CS Charles Keter said the ministry is working to ensure that locals are connected to the national grid as soon as possible while the chairman of Lake Turkana Wind Power Mugo Kibati said the Vision 2030 flagship project is a showcase of Kenya’s maturing profile as an investment destination of choice in Africa.

Other speakers included Marsabit Governor Mohamud Ali and his Samburu counterpart Moses Lenolkulal. The two leaders commended the President for his commitment to improving the livelihoods of all Kenyans by undertaking transformative development projects throughout the country.

LOIYANGALANI-SUSWA LINE TO ENHANCE QUALITY, RELIABLE POWER SUPPLY



KETRACO MD, FCPA Fernandes Barasa, OGW (centre) takes H.E. the President Uhuru Kenyatta and H.E. the Deputy President Dr. William Ruto through the transmission map at Loiyangalani

The launch of the Sh28 billion Loiyangalani-Suswa Transmission line project will see an increase in electricity supply, quality, reliability and a reduction of power cost in the country. It was funded by the Kenyan Government (75%) and the Spanish Government (25%) and is set to transmit 310MW, approximately 15% of the country’s installed capacity.

The project that compliments the Government’s commitment to increase electricity generation to 5,000MW is part of Kenya’s Vision 2030 flagship projects, as well as being critical for achieving the Big Four Agenda on sustainable development.

The Big Four Agenda together with the Strategic Development Goals, or SDGs, are in line with KETRACO’s mandate as outlined in the Strategic Plan 2015/2016 - 2019-2020 that identifies national development challenges in the electricity sub-sector that need to be addressed for Kenya to achieve its goal of being a middle-income, industrialized and prosperous economy.

With the 310MW added to the national grid, the President ordered a reduction on the cost of electricity to SMEs, noting that the high cost of power was a major challenge to their efforts of scaling up business. The project will harness the efficient, clean and affordable source of wind energy, from Loiyangalani area via the Lake Turkana Wind Power Plant (LTWP).

Previously, Energy CS Hon. Charles Keter had commended President Kenyatta, PS Ministry of Energy Dr. (Eng.) Joseph Njoroge, National Treasury, Presidential Delivery Unit and Office of the President for their guidance towards the completion of the project, adding that through the project, the country will save at least \$150 million annually on fuel imports used to generate electricity. He said the timely completion had saved the exchequer a monthly penalty of Sh1B.

The Sh70 Billion wind farm sits on 40,000 acres of communal land and is the largest private investment in Kenya's history comprising of 365 wind turbines, each with a capacity of 850kW.

The fibre optic cable strung along the Loiyangalani-Suswa Transmission Line will promote broadband connectivity in areas it traverses enabling faster connectivity to voice, data and video services, security surveillance and other government digital services.

The transmission lines carry internet fibre - Optical Ground Wire (OPGW), used for data and communication purposes. OPGW is the most reliable connectivity compared to buried cable. Thus, KETRACO fibre strengthens Internet Protocols (IP) networks by providing reliable and resilient redundancy, which is critical in any network.

The 400kV Loiyangalani Suswa Transmission Line is 438Km long, and evacuates 310MW of power from Lake Turkana Wind Power to Suswa substation in Kajiado County. It traverses six counties that include Marsabit, Samburu, Laikipia, Nyandarua, Nakuru, Narok and Kajiado.

The construction of the Suswa substation began in 2012 while that of Loiyangalani substation began in 2015 with Siemens S.A.S (France) as the contractor. The initial completion date was October 10, 2016 but was extended due to challenges from the contractor's end.



KETRACO tower with high voltage transmission lines

KETRACO later signed a contract with the Consortium of NARI Group Corporation and Power China Guizhou Engineering Company Limited for the completion of the line before August 31, 2018.

KETRACO Managing Director FCPA Fernandes Barasa say lessons learnt from the project would help the company focus on the completion of other grid strengthening, access, regional inter-connectors and evacuation transmission projects.

He notes that the transmission line rated at 1,200MW would take care of future generation plants along the area it traverses, which will comprise of solar, geothermal and other wind farms, without necessitating construction of another transmission line.

Since incorporation in 2008, KETRACO has completed transmission lines totalling 2,315Km, offering more than 99.9 per cent reliability. Currently 2,000km lines are under construction



Members of the Samburu Community entertain guests during the LSTL commissioning event

NEW KETRACO DIRECTORS PROMISE TO FIX POWER DIPS

The newly appointed Kenya Electricity Transmission Company (KETRACO) Board of Directors embarked on an inaugural project inspections and benchmarking tour between 2nd- 7th April (Western Kenya) and April 23rd-27th (Coast Region) and made observations that are aimed at improving service delivery and enhance the attainment of the company's chore mandate.

Led by chairman, Hon. Eng. James Rege, CBS and Managing Director, FCPA Fernandes Barasa, OGW, the team visited ongoing and completed projects where they encountered emerging issues that cut across all the projects while some were distinctly unique to particular projects.



KETRACO MD, FCPA Barasa (left) during one of the inspection tours of the Loiyangalani Substation prior to completion.

Other directors in the tour were Lizzie Chongoti, Philip Mongony, Joakim Kamere, Arch. Muraya Kariuki, Grace Ndugu. KETRACO's General Manager, Technical Services Dr. Joseph Siror and Senior Manager, Operations and Maintenance, Eng. Fanuel Tsuma also accompanied the board among others.

During the tours held in two phases, the board also paid courtesy calls on West Pokot County government, Homa Bay County Government, Kilifi County Government and on the management of one of the largest power consumers in the Coast region - Base Titanium at their site offices in Kwale County.



Directors inspect a substation during a recent projects inspection and benchmarking tour

The board held a brief meeting with Base Titanium General Manager Operations Denham Vickers and Maintenance/Engineering Manager Tony Venturini before the team was taken on a tour of the factory and its expansive sites.

During the meeting it was noted that unreliable power caused frequent shutdowns thereby slowing down pace of work and inflating costs of operations at the factory. The board noted that power dips was a real problem and that they were related to medium voltage lines.

They called for analysis to be carried out on dip duration and frequency so as to find most effective mitigation mode. The board noted that there was an urgent need for a dedicated line to the factory to stabilize supply.

At Malindi Substation the board appreciated the connection to the substation of the incoming 132kV transmission line from Rabai and outgoing 132kV transmission line to Garsen. They were shown the secondary equipment for protection and control for the substation and their functionality.

The new substation security surveillance system was presented to the board of directors by the project manager Eric Chuma and the senior manager TI Ms Mumbua Giati.

They appreciated the progress made in various works in Olkaria-Lessos-Kisumu, Sondu-Homa Bay and at the Suswa HVDC Substation. They urged for the speedy completion of the few pending works.

Other projects visited include Turkwel-Ortum-Kitale including Kitale Substation, Ortum Substation, Kibos and Mamboleo Substations. At Olkaria IV U 6 where the board appreciated the vast resources of current and future sources of geothermal power. KETRACO has on its part developed transmission lines that will evacuate all the power generated from these geothermal resources in line with Vision 2030. They found tower foundation and erection works going on with Marula Farm.



KETRACO Directors led by Chairman Hon.Eng. James Rege (5th left) are briefed at the Marula Farm during a projects inspection tour of Western Region

KETRACO IMPLEMENTS CHAIRMAN'S WORD ON MAKUENI POWER DEAL IN RECORD TIME

By Ken kabasa



Senior Manager, Power Management Eng. Henry Odedeh (gesturing) explains to the Makeni County Government delegation led by Agriculture Chief Officer Mary Muteti, operations at a KETRACO substation during a visit to Wote Substation

The time is 8 a.m October 22, 2019. The weather man describes Makeni County at this time as hot & dry during the day and cool and dry during the night.

Our Board Chairman Hon. Eng. James Rege has set off on a routine inspections and tour of the ongoing Sultan Hamud-Wote - Kitui-Mwingi-Garissa Transmission line, Transmission line under the able guidance of Dr. (Eng.) John Mativo (KETRACO Ag. General Manager, Projects Services) also in the team is Celestine Kaseve (Senior Social Scientist), Vivian Kemboi (Technical) and myself.

This trip is planned to take four days, visiting three Counties; Makeni, Kitui and Garissa. These are the Counties through which or are intended to benefit from the Transmission line; Sultan Hamud – Wote – Mwingi – Garissa and its Sub Stations.

Apart from the routine inspection of the project status and situations at our Sub Stations, we also have planned meetings as part of the trip with respective County Government officials and large power consumers within the project area

We shall begin in Makeni County. Along Mombasa road you cannot escape to appreciate the Isinya – Mombasa Transmission line, one of KETRACO's key projects. It's long journey to the Coast is interrupted at an open field and there stands our Konza Sub Station already energized waiting to lit up and provide the power required at the Kenya's upcoming Silicon Valley; the Konza City.

The partly dusty drive through the beautiful hills of Masaku, one shopping Centre after the other leads us to our first stop, Kalamba fruit processing factory in Makeni.

It's low season for the Mango fruit farmers and thus the factory which has a capacity of crushing five metric tonnes a month stands with less action lest for the administration staff at the offices planning for the next season's activities coming up around next January.

Kalamba Fruit Processing Factory is operated by the Makeni County Government and thus the staff we are about to meet are employees of the County Government Department of Agriculture. On site is the General Manager, Mr. Julius Musyoki, Plant Engineer, Eng. Muthui and the production Manager a Mr. Musyoka amongst other staff.

Electricity supply from the national grid around this area is either insufficient or not available most parts of the day; a serious case of unreliability. The representative of our sister company KPLC (in attendance) has warned us against exposing her. She has threatened to storm out in case it gets unbearable for her.

I have informed our team of her concerns and the Chairman responding with an assuring tone says it is really not her problem that the power is unreliable. "we are all looking for a solution," says Chairman Rege.

Phelister is scared she doesn't know what to expect from the customers but not known to her is how we all feel about the situation, the idea behind the setup of this factory is noble but without reliable power, they have no reason to continue operating. The losses incurred are not measurable; it is clear this project is not sustainable under diesel generated power.

The General Manager's narration of their experience with the unreliable power leaves no question on all of us. What could be Chairman's next course of action? What could be going through his mind? He is already aware they could be some delay on the project implementation and doesn't understand how and why. Dr. Mativo saves the day by explaining the status and the cause of the delay.

The dusty road drive across the villages from where we are able to see progress on the construction of the transmission line from Sultan Hamud to Wote follows. Along the line, we witness the cause of the delay at points where distribution lines have been constructed right beneath the High voltage transmission line leaving no room for clearance and a clear evidence of breach of safety.

It is very evident from the looks at everyone's faces that things are not very okay. Some more explanations could be required soon.

A meeting is scheduled at Governor Kivutha Kibwana’s office and waiting to receive us is the County Secretary Mr. Paul Wasanga who has put together a powerful team of the Makeni County Government officials.

The narrative of experiences of County institutions under what they call bad management and unreliable power supply speaker after speaker only adds salt to the wound and our time to respond will finally come. Chairman responds and leaves us wondering whether to stop the planned four-day trip here, come back to Nairobi and sort the underlying issues around Sultan Hamud – Wote section or proceed with this trip.

“Bwana CS, kindly pass my gratitude to H.E and give him my commitment, we shall have the line and Sub Station energized in two months’ time,” Said Chairman. The rest of us are left with our mouths agape. “Please give the Governor my word, it shall be done,” he adds with finality.

Back in Nairobi, efforts put by our technical team and that of the sister company in resolving the issues, has not yielded much. There is nothing to write about the series of meetings discussing who bares the responsibility for re-routing of which line to give way for the project to proceed.

When it is eventually agreed upon to re-route the distribution line, the cost of re-routing it is again mind boggling. Word goes round too fast that a commitment has been given by Chairman for completion of the section by end of December and when the teams sit next, what happens after that meeting is a miracle.”

Looks like the December 2018 holidays was never a reward to some of our engineers. On January 14th 2019, I bump on an email; Eng. Phelister Nadimo of KPLC reports back to her peers and her email reads in part.....

1. Town feeder – Ready
2. Kathonzweni feeder – Ready
3. Kola feeder – Ready
4. Kaumoni feeder – Ready”

Later in the day an email from Eng. David Mwaniki of KPLC to our Eng. Henry Odede (Senior Engineer, Power Management also reads in part....

”and confirmation that the snags early identified were corrected. We propose to engage KETRACO with a view to charging the line on Thursday Jan 17th 2019. Kindly approve.” Chairman returns from his holiday trip in USA on 16th Jan 2019.

Due to some unavoidable technical issues, the planned charging is postponed and effectively done on 24th January 2019. Going by Chairman’s commitment to Governor Kivutha Kibwana, we are two days late.



Dr. (Eng.) John Mativo Ag. GM Projects Development Services-right, Eng. Justin Muna Chief Civil Engineer-2nd right and Eng. Henry Odedeh Senior Manager Power Management-2nd left at Wote Substation



KETRACO Chairman HE.Eng. James Rege, CBS (3rd left) and senior KETRACO engineers pose with Makeni County Government Officials during a tour of Wote substation

KETRACO, WEST POKOT COUNTY GOVERNMENT IN PARTNERSHIP TO REVAMP KAMATIRA FOREST

By Noela Toywa



West Pokot Governor, H.E. John Lonyangpuo, CBS plants a seedling during the KETRACO sponsored tree planting occasion at Kamatira Forest in West Pokot County. Looking on (right) is Dr. (Eng.) Joseph Siror - KETRACO General Manager Operations, Systems and Power Management.

The Kenya Electricity Transmission Company (KETRACO) held a tree planting exercise on the 2nd of July at Kamatira forest in West Pokot County.

The tree planting exercise was aimed at enhancing environmental conservation and partnership between KETRACO and West Pokot County government in providing efficient power to the region.

KETRACO's General Manager Technical Services Dr. (Eng.) Joseph Siror and West Pokot governor Prof. John Lonyangapuo led teams from both organizations in the one-day exercise which saw 2,500 seedlings planted in the expansive Kamatira forest.

The Turkwel– Ortum – Kitale electricity transmission project that is meant to improve power supply reliability and provide stable voltage profiles within the North Rift region traverses West Pokot county.

The ongoing 138km 220kV single circuit line has a rating of 106MW and runs from the Turkwel power plant to Ortum and Kitale. The project includes two substations at Ortum and Kitale and expansion of Turkwel substation. It will provide an alternative power supply path for power generated at Turkwel.

The community of West Pokot expressed gratitude at KETRACO Projects noting that the seedlings planted would be of great impact to the region's environment. They said a previous initiative did not yield much as the seedlings were destroyed by animals.

KETRACO at the same time funded the fencing of the five-acre portion of the forest where the seedlings were planted. The company made an appeal to the Governor to beef up security in the area to ensure safety of the seedlings.

Community members appreciated KETRACO's Power transmission programs in the area noting that the company had done a good job and should consider dedicating a special line to enhance socio-economic and industrial growth in the area.

"This is a digital world and we would like KETRACO to work with the county government to provide power to the Kamatira area for more economic activities to be undertaken," said Shilah, a community member from Kamatira.

“This is a great day for the people of Pokot because we have covered five acre of the forest during this tree planting exercise. If you take care of these trees, we will be able to improve on our environmental situation here. We love the people of West Pokot and we want this county to move forward and also make sure that our transmission line is safe,” Dr. Siror

“Trees contribute to the environment by providing oxygen, improving air quality, climate amelioration, conserving water, preserving soil, and supporting wildlife. During the process of photosynthesis, trees take in carbon dioxide and produce the oxygen we breathe,” said Dr. Siror.

KETRACO’s initiative to plant trees comes on the heels of a heinous experience that saw huge segment of trees in the forest destroyed by mysterious fires.



TOK Transmission Line Project Manager Eng. Samson Akuto plants a tree at Kamatira Forest

“It is great that we are working together for the restoration and rebuilding of Kamatira Forest because where we have come from very far as partners in matters development,” said Lonyangapuo.

“We are planning to meet energy Cabinet Secretary Hon. Charles Keter to come up with a framework to partner with the energy sector companies to spur development programs in our county for the good of our people,” the governor added.



West Pokot Governor H.E. John Lonyangapuo, KETRACO GM Operations, System and Power Management Dr (Eng.) Joseph Siror (in reflector jacket) at Kamatira Forest.

Kamatira Forest / Rift Valley Province

■ 1°16'0" N
 ■ 35°10'60" E
 ■ ~1,983m asl
 (EAT - UTC/GMT+3)

Kamatira Forest (Kamatira Forest) is a forest(s) (class V - Vegetation) in Rift Valley Province (Rift Valley), Kenya (Africa) with the region font code of Africa/Middle East. It is located at an elevation of 1,983 meters above sea level. Kamatira Forest is also known as Kamatira Forest, Kamatira Forest Reserve.

Its coordinates are 1°16'0" N and 35°10'60" E in DMS (Degrees Minutes Seconds) or 1.26667 and 35.1833 (in decimal degrees). Its UTM position is YG44 and its Joint Operation Graphics reference is NA36-12.

Current local time is 20:25; the sun rises at 08:40 and sets at 20:47 local time (Africa/Nairobi UTC/GMT+3). The standard time zone for Kamatira Forest is UTC/GMT+3
 In 2019 DST starts on - and ends on -.

A Forest(s) is an area dominated by tree vegetation.

KETRACO EMBRACES SAP ARIBA TO ENHANCE EFFICIENCY IN PROCUREMENT PROCESSES

SAP ARIBA SOFTWARE TO PROVIDE CLOUD-BASED PROCUREMENT SOLUTIONS

By *Carolyn Kiara*



Senior Procurement Officer Ms. Prisca Kubasu addresses staff members during SAP Ariba training launch at the Boma Hotel

The Kenya Electricity Transmission Company (KETRACO) has adopted an e-procurement solution with seamless integration to IFMIS as per regulations put in place by the government to safeguard on transparency and accountability.

Through Executive Order number 2 of 2018 on procurement of public goods, works and services by public entities – the president directed that all public entities migrate to e-procurement solutions as a stop gap measure to the run-away corruption that has engulfed the country.

In full compliance with the executive order – KETRACO has embraced “SAP ARIBA” – a digital platform where buyers and sellers collaborate on transactions, strengthen their relationships and discover new business opportunities.

SAP Ariba is a software that provides a cloud-based procurement, spend management and supply chain services that enable suppliers and buyers to connect and do business globally.

Through this network – applications, services or resources are made available to users on demand via the internet from a cloud computing provider’s servers, in this case, SAP Ariba servers.

The technology will make it simple to accelerate the procurement process throughout a procurement life cycle by integrating the entire KETRACO’s buying process across the entire organization and offering an end-to-end automated system that removes complexity and allows buyers and suppliers to manage everything from contracts to payments all in one place.

The company (KETRACO), in this case the “buyer” will ask suppliers to join SAP Ariba Network so that they can work together more efficiently and effectively on all the shared aspects of business commerce for example proposals, contracts, orders, invoices and payments.



In 2016-2017, KETRACO implemented SAP ERP going live with modules that include Materials Management (MM), Finance and Controlling (FICO), Human Capital Management (HCM) and Project Systems (PS) in Phase I and Business Intelligence, Employee Self Service/Manager Self Service, Travel Management, Document Management and eRecruitment in phase II.

Materials Management Module (MM) automated the manual procure to pay process from raising of purchase requisition to creation of purchase orders. However, a gap existed where the supply chain tendering process was being done manually. This was inefficient and time consuming as opening and evaluation teams had to manually go through many bids during the tendering process.

SAP’s solution to e-procurement was either SAP SRM (Supplier Relationship Management) Module or SAP Ariba Cloud Solution. Through a compelling business case, KETRACO chose the latter as the new innovative cloud platform for end-end supply chain process. Also, SAP will stop supporting SRM in the next five (5) years and customers will be required to migrate to SAP Ariba.

KETRACO is seeking to deploy the best in class procurement cloud solution to remove reliance on inefficient process. This is through the elimination of paper-based communication with suppliers, improving supplier relations through electronic communications and enabling order management feature like electronic confirmation which allows procurement to gain quick insight into suppliers ‘ability to deliver. There is also the aspect of enabling e-invoicing which allows suppliers to invoice promptly and again visibility into invoice performance.



MD, FCPA Fernandes Barasa, OGW (2nd right), General Manager, Strategy, Research and Compliance Ms. Mumbua Giati (3rd right) and Senior Procurement Officer Ms. Prisca Kubasu at an SAP Ariba training.

KETRACO TRAINS STAFF ON SECURITY AND SAFETY

By Brenda Kemboi



Notes during a Staff Security and Safety training

THE Kenya Electricity Transmission Company (KETRACO) staff have undergone a comprehensive security and safety training to equip them with knowledge on safety and emergency techniques.

The one-week training hosted at the Company's Kawi Complex auditorium saw the staff taken through key topics including terrorism and fire outbreaks among others.

Security Manager, Mr. Godfrey Imanene who coordinated the training made reference to deadly terrorist attacks at Garissa University in 2015, Westgate in Nairobi's Westlands in 2013 and Riverside in January this year, that left dozens of people dead and several injured.

According to Mr. Imanene, terrorism remains an act of threat which involves use of excessive violence on unsuspecting people. Terrorism endangers lives in many ways as it involves the release of toxic explosives, radioactive substances and biological weapons to cause harm to mammoth crowds. During the training, samples of the explo-

sives were availed to the staff to examine to enable them recognize the substances whenever they happen to be involved in such situations.

"These explosives are chemical compounds in either solid or liquid form, which contain large amounts of energy used to cause explosion," said Imanene.

The staff learnt that there were two categories of explosives, namely high explosives which breaks down into primary high explosives and secondary high explosives. The low explosives include the black powder, smokeless powder while high explosives include the lead azide and tetrazine among others under primary high explosives and Tri Nitro Taluene (TNT). Dynamite is under secondary high explosives.

The staff also got to know about Improved Explosive Device (IED) which are non-military, non-commercial modified explosive devices designed by the builder, with the knowledge and available materials. They are also known as home-made bombs limited only by the imagination of the bomb maker.

Techniques of handling different security situations, such as when under attack were explained to the staff.

"In the case of grenade attack for example, immediately turn away from the grenade and take one long giant step, drop on the ground and lay on your stomach, remain in a straight position with your legs crossed for purposes of protecting most critical organs such as heart, kidneys, lungs from the pressure created by the blast. Lying down also decreases the amount of fragments that can hit you," said Imanene.

"Never attempt to disturb or move suspicious objects. Have minimal time as possible on a suspicious object. Never try to handle a situation which you are not conversant with, keep off the scene until it is cleared of secondary devices in case of explosion among others," he added.

A safety officer, Mr. Davis Ochila emphasized on prevention as the most effective way of controlling fire emergencies.

KETRACO PUTS IN PLACE EFFECTIVE GRIEVANCE REDRESS MECHANISM

By Mildred Ogendo



Senior Social Economist Ms. Mildred Ogendo addresses a stakeholder meeting for OLK during and engagement forum in Kisumu.

The Kenya Electricity Transmission Company's grievance redress mechanisms are in tandem with the globally accepted procedures and processes.

It is commonplace that in the lifespan of project implementation there are possibilities that grievances of varying magnitudes may arise.

There are however several internationally accepted approaches that are believed to have harmoniously helped resolve grievances and paved way for projects completion. Experience has shown that grievances may arise from communities who are dissatisfied with the eligibility criteria, community planning measures or actual implementation of resettlement. In the Resettlement Policy Framework, KETRACO has a set of things that are documented as eligible for compensation. These include structures, crops, trees and parcels of land affected.

Others are innate and may not be very explicit but may warrant attention and compensation such as shrines, relocation of grave sites and even business premises or activities that may warrant relocations.

These items are not very clear in the Resettlement Policy framework but sometimes result into complaints grievances.

Grievance Redress Mechanism simply means a systematic documented step by step procedure used to receive complaint or grievance and act on the complaint to conclusion.

GRM is embedded in the Resettlement Policy Framework that guides the study of Resettlement Action Plan as per the World Bank Operations Policy 4.12.

In line with this, KETRACO developed a Grievance Redress Mechanism that has been used since the approval of Resettlement Policy Framework in March, 2011. The steps that are in the policy are as outlined here:

- Start with registration of the grievances with the RAP Implementation team
- Its assumed the RAP committee will handle the issue (in conjunction with Compensation Committee, comprising of 2 representatives of the PAPs, the area District officer, area chief (s), 2 KETRACO staff from the Way leaves and Socio Economists sections and the leader of the RAP Implementation team
- The committee will seek to eliminate nuisance claims and satisfy legitimate claimants by attempting to reconcile the aggrieved PAP(s) and the KETRACO through the PMU. The response time will depend on the issue to be addressed but it should be addressed with efficiency.

Compensation will be paid to individual PAPs only after a written consent of the PAPs, including both husband and wife.

- If the committee is unable to reconcile the claimant, then the matter should be taken to the local courts for settlement. It will be the responsibility of the Compensation Committee to inform the aggrieved PAP(s) clearly about his/her rights and offer advice on the steps to obtain legal redress. The aggrieved PAP(s) will have the right to pursue the matter through the courts up to the highest level if necessary.

A critical look into our process shows that procedures were borrowed from a parent organization which assumed the role of other agencies including the county government and the ministry of energy as having overall roles in management of projects. This has not worked well because KETRACO assumed more of autonomous roles and only escalates major grievances to the ministry of energy or the National Lands Commission. RAP committees as envisaged comprises area deputy county commissioner, area chiefs and KETRACO staff. Much as the company uses these government officers for redress – not all grievances pass through this channel. The RAP committees therefore never took off as per the purpose it was all meant to perform.

Given that KETRACO infrastructure is linear by nature – the committee lifespan is very limited. It means the committees must be more localized with the affected elected by the members both in the categories of structure owners and Land parcel owners. To test whether your GRM is functional, one looks at the flow of the grievances into an organization. If the grievances are always received at the top of the Organizational structure, then it confirms failure of the procedure. .

Our socio-economists are working round the clock to ensure new proposed procedures of handling grievances are harmonized with the existing ones to streamline mechanism for handling grievances. It is in order for the process to start with registration of the grievance with the elected county resettlement committee at the project site. The committee will comprise of members of the Location with the supervision of the area chief.

The Community Resettlement Committee will resolve the Grievance and escalate the unresolved grievance to KETRACO which will be logged in and follow the procedure to the next level where grievances received in KETRACO through Email, letters, verbal, suggestion boxes, court summons or from the Community Resettlement Committees will be logged in and resolved by respective officers' dependent on the grievance. Grievances which are not resolved will be escalated to Project Implementation Unit(PIU) also referred to as PIT who will try to solve the grievance using all methods including holding a meeting with the aggrieved party. If resolved, it ends here, if not resolved, the PIU will forward the unresolved Grievance to NLC (through our Legal Department for arbitration). NLC will resolve the grievance. If the grievance is not resolved by NLC, Legal Department (Company Secretary) will initiate arbitration process with the aggrieved party who will be invited for hearing. If resolved, it will end in an award. If the aggrieved party challenges the award, it will proceed to court which will give judgement.

TOK TRANSMISSION LINE TO MITIGATE ELECTRICITY CRISIS IN FOUR COUNTIES



West Pokot County Secretary Dr. Mark Parklea chairs a meeting between his County Government and KETRACO Directors at West Pokot County Governor's Board Room. The Directors were on an inspections visit to TOK Project.

The Turkwel Ortum Kitale (TOK) Transmission Line project involves the construction of a 138-kilometer, 220 kV double circuit line from Turkwel Power station with substations at Ortum and Kitale town.

The project is financed by the Government of Kenya (GoK) and Exim Bank of India with the objective of providing additional power transmission capacity to the national grid in order to meet the increasing demand for electricity supply in West Pokot, Trans Nzoia, Bungoma and Uasin Gishu counties. Once complete, the line will improve the quality and reliability of electricity in the Northern and Western Kenya counties.

Transmission line contract (Lot 1B) is being implemented by KEC International while the substations (Lot 1A) was awarded to Jyoti structures limited, both Indian companies. Construction of the transmission line involved excavation, foundation, erection of towers and stringing. This process began in December 2014 and is expected to be completed before the end of 2019.

The project completion date delayed due to wayleave issues from the affected communities. The affected communities include the pastoralist Pokot community in West Pokot County and cosmopolitan Trans Nzoia County. The land tenure systems in the counties are both private and community trust lands. Other notable areas affected by the project include Nasolot game reserve and Kamatira forest both in West Pokot county.

In order to fast track, the completion of the project, the wayleaves team adopted strategies for wider stakeholder involvement. This included working closely with the political leaders, administrators, local leaders, community elders, opinion leaders, ranch officials and the county governments structures both in West Pokot and Trans Nzoia counties.

KETRACO recently adopted a section of Kamatira forest for re afforestation. This is part of the enhanced partnership between the County government of West Pokot and KETRACO. The forest is managed by the department of water and environment at the county.

CONSTRUCTION ACTIVITIES ALONG MARICH PASS

Marich Pass section along the transmission line is unique for a number of reasons. In Marich section, there is a river, a road and the only possible passage for all other infrastructural developments including power distribution and transmission line.

During construction of the transmission line, this was the only available section to route the infrastructure despite the rugged terrain characterized by steep mountains and interlocking spurs of the Marich and Sigor hills.

One tower location (Location 7/0) remains a land mark. It took the contractor the longest period spanning close to four months to open an access to the site, excavate, carry out tower foundation works and erect. This was because the location was high up on a hill facing Marich Pass. The contractor had to employ meticulous planning and highly skilled staff to conquer the ensuing engineering challenges.

The Lodwar Kitale highway was closed at intervals during excavation works to give room for falling rocks and boulders that would roll down past the road into river Marich. Without proper telecommunication connection, the engineers had to use special walkie-talkie to manage each and every activity. A slight communication breakdown would mean a total disaster.



CEO, FCPA Fernandes Barasa, OGW presents branded KETRACO Merchandise to West Pokot County Secretary Dr. Mark Parklea when KETRACO Directors paid a courtesy call to West Pokot County Governor's Office. They were on an inspection tour of TOK Transmission Line Project.

KETRACO SPONSORS GOLF TOURNAMENT

By Noela Toywa



A golfer tries his hand at the ball during the Golf tournament at Sigona Club

This is part of KETRACO’s annual undertaking where staff come together to appreciate their stakeholders for standing by the organisation. The company has been working round the clock to enhance the National Grid with the need to promote cheap renewable energy.

“We are proud to be supported by these commendable organizations and we are grateful to our generous sponsors and the young professional volunteers for making this event a huge success,” said Mr. George Mwaura, chairman Sigona Golf Club.

The tournament was described by stakeholders one of the first-class events aimed at enhancing competition in golf. It took place on September 14th at the Sigona Golf Club.

Beginning at 7.30 am with registration and general preparations both first time players and regular ones had a chance to get orientation tips before venturing into the golf course.

The Kenya Electricity Transmission Company (KETRACO) sponsored a Golf tournament at Sigona Golf Club, Nairobi aimed at sharing experiences on the firm integration between golf and business.

The one-day tourney also provided a platform for KETRACO to showcase its successes in business and the discharge of her mandate as the official electricity transmission infrastructure operator in Kenya.

The event was attended by among others Chairman Sigona Golf Club, Mr. George Mwaura, KETRACO’s Company Secretary and General Manager Legal Services, Mr. Duncan Macharia who represented the MD, KETRACO Director Arch. Kariuki Muraya who is also the Captain, Golfers and different Stakeholders.



Director Arch. Kariuki Muraya at the Golf tournament at Sigona



CS/GM Legal Services Mr. Duncan Macharia addresses the golfers at the Club house after the tournament

“The event would not have been possible without their tireless efforts and the organization put in place to prepare for weeks and even months leading up to the event,” said the chairman.

More than 150 golfers including partner companies representatives took part in the tournament with each of the teams playing at over 18 holes and spreading out over three courses.

Throughout the courses, several hospitality tents hosted by KETRACO were set up and served a wide range of food varieties to keep players sustained in the heat of the day. Winners were selected in each of our three categories: Best player and Best Overall.

Following the tournament, an awards ceremony and check presentation took place over dinner at the clubhouse. Mr. Macharia who represented the Managing Director, also took part the tournament and later gave an address at the closing ceremony. This tournament brought together company employees and partner companies for a day of fun while raising ideas to benefit the community in which we all work and live,” he said.

“This event would have been possible without their tireless efforts. KETRACO and the organizing did a lot to prepare in the weeks leading up to the event,” said George Ngugi, the SCADA Manager.

KETRACO'S FIRST ANNUAL RESEARCH CONFERENCE

A CALL FOR EFFICIENT AND RELIABLE ELECTRICITY TRANSMISSION

By Noela Toywa

The need to focus on enhancing efficiency, reliability and expanding knowledge in Electricity Transmission in Kenya caused Kenya Electricity Transmission Company (KETRACO) to undertake Annual Research Conferences.

On Friday 31st May, 2019, KETRACO held its first annual research at the Intercontinental Hotel in Nairobi.

Principle Secretary in the Ministry of Energy, Dr. (Eng) Joseph Njoroge, KETRACO Managing Director FCPA Fernandes Barasa, KETRACO Board Chairman Hon. Eng. James Rege and staff attended the conference.

The conference aimed at developing and expanding knowledge in the energy transmission field, focusing on current and emerging energy issues that call for request for generating solutions. It provided an open platform for debate and discussions from the attendees. "We need to accept that R & D plays a critical role in the innovation process and as an organisation, we want this to be part of our Management Philosophy", FCPA Barasa said. He added that KETRACO appreciates the need for engineering and introducing new products, processes and services through research.

Different institutions attended the conference including universities, among them Strathmore University which was represented by Prof. Izael Da Silver, DVC Research. Presentations included bridging the gap between academia and industry using lessons from German universities of Applied Sciences, role of decentralized energy systems in Kenya, the role of green energy in enhancing grid stability and reliability, the use of drone technology in grid maintenance and innovative financing methods towards grid development.

"The argument that Kenya has more power than we require is a big joke. If you shared out the 2,250 Mega Watts installed capacity amongst 50 million Kenyans, each will only have a mere 45 Watts. What can you do with 45 Watts?" Posed Prof. Izael Da Silver.



Energy PS, Dr. (Eng.) Joseph Njoroge, CBS addresses delegates when he officiated at KETRACO's first Annual Research Conference at Hotel Intercontinental, Nairobi.

Alexander Osundwa, an Electrical Technician discussed the concept of power transmission, focussing on green energy that will stabilize the transmission grid and enhance reliability. He also dwelt on power systems, especially as KETRACO gears up towards achieving Vision 2030 considering that the stability of the East African Power Pool is critical for development of the region.

The one-day conference drew exciting discussions on different topics. It was also attended by KETRACO Ag. General Manager, Finance and Strategy CPA Tom Imbo and an Economist Kevin Kyalo.

"We are calling for more collaborations with universities and other stakeholders to ensure that electricity transmission in Kenya employs new technology for efficiency," said Imbo. His sentiments were also echoed by Kyalo whose presentation centered on drone technology for transmission grid inspection. The presentation sought to determine whether drone technology could be used to inspect KETRACO's transmission projects.

"The current situation of high cost aerial inspections and resource intensive manual option is unlikely to get cheaper or faster. There are also threats to the energy grid such as vandalism and terrorism which cause outages. In order to provide a reliable supply of electrical power at minimal cost, the power industry needs power line inspection methods that are cost-effective, safe and efficient," Kyalo stated.

He also noted that the paper will elicit discussions for possible cost cutting measures in grid maintenance as well as timely response to faults.

Mr. Simon Nabosu and Mr. Kizito Omunkanga presentation explained the growing body of literature that recognizes the effect of innovative cost-effective ways on the financing and development of electricity transmission infrastructure.

The aim of this research, they said, was to review key themes around the topic, including smartphone technology, adoption of mini-grids in rural areas, government policy governing decentralization of electricity transmission and public-private partnerships.

The themes were then discussed using literature reviewed in the study. Implications for future research, practice and education were suggested in the conclusion chapter. This study has been able to identify various innovative cost-effective ways influencing the financing and development of electricity transmission infrastructure in Kenya.

JAPANESE FIRM, TECHNOVA, IN PARTNERSHIP DEAL WITH KETRACO TO ABSORB EXCESS POWER

By Jack Nduri



Representatives of Technova take KETRACO team through a power-point presentation at the boardroom, KAWI House.

A Japanese technology and research management firm, TECHNOVA Inc. is seeking partnership with the Kenya Electricity Transmission Company (KETRACO) to facilitate supply of electricity for the domestic production of nitrogenous fertilizers in Kenya.

The company seeks to be supplied with clean, reliable and efficient electricity to run the proposed factory to be established in the geothermal rich Rift Valley.

Technova Inc. General Manager, Energy and Hydrogen Group, Dr. Akiteru MARUTA led a high powered delegation to a meeting with KETRACO representatives where they made the proposal.

They took the KETRACO team through a moving power point presentation on Kenya's trade deficit; pitching electricity mix, geothermal potential, Hydrogen and Ammonia production potential/requirements.

The meeting chaired by KETRACO Senior Technical Advisor Dr. John Mativo was attended by chairman Hon. Eng. James Rege, Manager Systems Technology David Kariuki, Manager Business Development Dr. Samson Kamau and Senior Manager Power Management Eng. Henry Odched among others.

Technova representatives included Dr. MARUTA, Business Trip Coordinator Mrs. Ayako KASAI, Dean Graduate School of International Relations Prof. Reiji TEKEISHI and Geothermal, Environmental and Innovative Technology Projects Division Head Yusto TEKEDA.

The Tokyo-based technology think-tank is currently conducting the project Study on application of hydrogen fuel combined with geothermal power in East Africa based on official contract with United Nations Industrial Development Organization (UNIDO).

The purpose of the project is to evaluate the feasibility of the concept "Geothermal – to – Hydrogen (GtoH)," aiming to convert excess electricity into hydrogen in order to contribute to Kenya's electrification and industrialization objectives.

The project is also to provide UNIDO with insights on economic growth based on renewable energy in East Africa. The main results will be presented at UNIDO –hosted workshop during TICAD-7 on August 28-30, 2019 in Yokohama, Japan.

The call on KETRACO was in furtherance to their initial trip to Kenya in mid- June this year to conduct the preliminary assessment of the concept, which potentially helps Kenya's economy.

"In our thinking, hydrogen production by water-electrolysis is possible and hydrogen can be used for the applications like fertilizers (via ammonia), off-grid electrification and hydrogen drones," said Dr. MARUTA.

The proposed hydrogen production facility dubbed Kenya's Hydrogen and Ammonia Production Facility shall have a production system consisting of hydrogen production plant (electrolyser) and ammonia production plant.

According to MARUTA two hundred Megawatts (200MW) of electrolyser can produce enough hydrogen (then, ammonia) to meet Kenya's demand of DAP, urea and CAN fertilizers. With 5-6 Ksh/kwh electricity, he said, ammonia can be produced at 1,000 USD/ton which is equal to today's import price of ammonia.

"Total CAPEX of 600 Million USD is about three times of annual fertilizer import value. We believe KETRACO's inputs and comments are indispensable for us to complete the project," Dr. MARUTA said.

As part of the process, the team visited KETRACO's 500kV HVDC Suswa converter substation and the 400kV AC substation on July 30th, 2019 in the company of DR. Mativo, after extensive tour of Olkaria Geothermal station to see the possibility of its implementation.

WAYLEAVE ACQUISITION EASEMENT DOCUMENTATION REQUIREMENTS

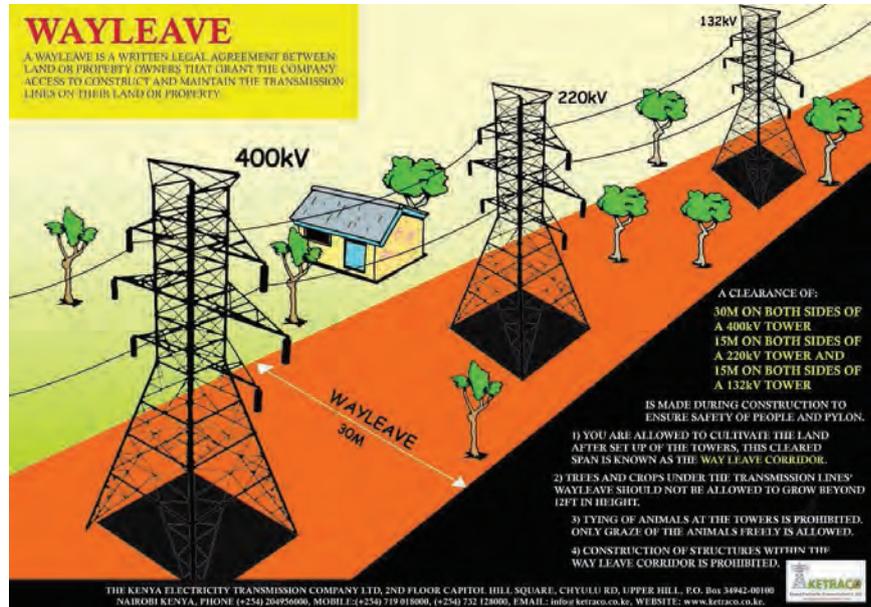
By Lydia Wanja

In order to fulfil its objectives, KETRACO approaches landowners to grant it permission to construct a transmission line utilizing a corridor ranging between 30m and 60m depending on the line voltage. The legal office is involved from the outset, in advising other arms of the company on matters where ownership is disputed, or tenure unclear, such as where the putative owner claims as a successor in title, or is in the midst of pursuing a chose in action such as a civil action, adverse possession or other litigious avenues to title.

The legal office also makes judgment calls balancing between risk and expediency, such as where land is in the process of adjudication, or is held in block title in the process of subdivision, or is owned by someone who is incapacitated by law, death, disease or is outside the territory of Kenya. The legal office sifts through claims and where necessary initiates court actions such as interpleaders to facilitate escrow, mandatory injunction or other arrangements that can facilitate the progression of works in the pendency of resolution of disputes e.g. establishment of ownership to title. The legal office also responds where the landowner is first to initiate litigation, such as where trespass is alleged.

Where the legal officer has perused documentation and has reasonably established the landowner's bona fides, the officer will proceed to draw an easement agreement, and witness (as required by law) that the landowner has properly executed the same. The officer will thereupon require other documents necessary to effect a registration be tabled. It is often that an officer will again have to make a judgment call and balance between risk and expediency where for instance a title document is held as collateral, or in bail bond, or is lost, or has never been obtained.

Documents necessary to effect a registration of an easement interest will vary mainly depending on the type of ownership as detailed below. The documents listed are a minimum requirement, sometimes, due to various reasons, a legal officer can require a land owner to present further documentation;



i. Land owned by a natural person

- Accepted Letter of Offer.
- Copy of the Identity card
- Copy of the PIN certificate
- Two passport sized photographs
- Ownership documents;
 - >> Original Title;
 - >> Confirmation from Settlement and Adjudication Officer where the land is undergoing adjudication
 - >> Recent official search (where applicable)
- Bank Details including branch where account is held
- Grant of easement executed by the landowner and witnessed by a lawyer.
- Mobile Phone details and post office number of the land owner.
- Where the grantor prefers payment to be made to an account other than his own, a written authority to that effect as per an appropriate format that is available in the legal office.

ii. Land owned by an Individual (Deceased Land Owner)

- Accepted Letter of Offer.
- Grant of easement executed by the administrators of the deceased's estate witnessed by a lawyer.
- Grant of letters of administration or certificate of confirmation of grant. If these are not available, the proposed administrators need to provide the following for our advocates to immediately commence succession proceedings;
 - >> Chief's letter nominating proposed administrator(s) and signed by all beneficiaries - it should be noted that the beneficiaries include both male and female beneficiaries - an appropriate format is available in the legal office.
 - >> Death certificate
- Copy (ies) of the ID(s) of the administrator(s) and all beneficiaries if they are over 18 years

In some special circumstances, compensation which value does not exceed Kshs. 500,000 will be paid without furnishing letters of administration. In such cases, a Discharge and Indemnity (as per an appropriate format available in the legal office) and a duly filled chief's letter (similarly, as per an appropriate format available in the legal office) shall be required in addition to all other documents listed herein.

iii. Land owned by Incorporated Companies

- Accepted Letter of Offer.
- Grant of easement executed by two Directors or a Director and the Company Secretary and witnessed by a lawyer.
- Certificate of Incorporation
- Copy of CR12
- Company PIN
- Copies of the IDs of a least two Directors (or those of a Director and the Company Secretary)
- Copies of the PIN certificates of at least two Directors (or those of a Director and the Company Secretary)
- Two passport sized photographs of at least two Directors (or those of a Director and the Company Secretary).
- Ownership documents i.e. Original Title; Official Search; Confirmation from Settlement and Adjudication Officer where the land is undergoing adjudication
- Bank Details of the Company including branch where account is held
- Mobile Phone details of one Director/Company Secretary and post office number of the Company.

iv. Land owned by Group Ranches.

Ownership is determined in accordance with the Community Land Act No. 27 of 2016 of the Laws of Kenya. Land is owned by members.

- Grant of easement executed by Chairman, Secretary & Treasurer and witnessed by a lawyer.
- Accepted Letter of Offer.
- Ownership document i.e. Original Title; Official Search; Confirmation from Settlement and Adjudication Officer where the land is undergoing adjudication
- Copy of Ranch KRA PIN Certificate
- Copy of the Ranch incorporation certificate
- A copy of the last Notification of Change of Group Representatives to the Registrar of Group Representatives – This will show the date of the last general meeting and the persons elected to be the executive officers (chairman, secretary & treasurer) and group representatives. In the alternative, copy of minutes which have been presented to the Registrar of Group Representatives
- Copy of ID's of group's ranch officials (chairman, secretary & treasurer) Copy of KRA PIN Certificate of Group Ranch officials.
- Two passport size photos of the ranch officials
- Ranch Bank Details including branch where account is held.

v. Un-adjudicated land

- Accepted Letter of Offer.
- Ownership document;

A letter from the chief which should contain a list of all the persons who have an interest in the property and each of these persons consenting to payment of the compensation to the designated payee (they should sign against their names). The letter should be a written corroboration that the persons listed indeed are the only ones with an interest to the land.

>> Confirmation from Settlement and Adjudication Officer where the land is undergoing adjudication

- Copies of the IDs and PIN certificates of all the persons listed as having interest in the property.
- Passport sized photographs of all the above persons.
- Acceptance of the letter of offer.

vi. Land owned by a Self Help Group

- Accepted Letter of Offer
- Certificate of incorporation
- KRA and ID of officials or trustees
- Minutes used during registration that shows the officials and members if the group formation is recent. In older groups (say over two years), minutes where a resolution is made on how the loss of user compensation is to be handled – the meeting should be attended by more than two thirds of the members.
- Bank Account of Group
- Passport sized photographs of the officials.

A TOWERING JOURNEY

DEVELOPING THE ILIS SOLUTION

By Victor Wahome

A diamond sparkles in the sunlight but cuts through rocks and metals. Such is the duality of the modern and progressive transformational leadership approach that the Victor Wahome follows.

I described myself as a pragmatic, bare-bones champion. I don't like to lose and if it must happen, I treat it as a learning opportunity to build on future successes. Working on the ILIS Solution pushed me to my limits. Suffice to say that any major project requires focus, discipline to execute and of course sacrifice. I won't delve too much into the latter, may be that I'm a bit leaner on the sides than I was when I started the Project. That can be addressed moving forward with a change in diet; more pork ribs perhaps. Focus and discipline on the other hand are what I'd like to address.

It took us (Aegir team) around 50 weeks to deliver the Solution. Patience and perseverance are key to the success of any project and in life. The Integrated Location Intelligence System solution is an enterprise system that has been designed and developed to automate KETRACO's core business; transmission line engineering planning, design, construction, and maintenance.

The Journey has a prize at the end. We have had several in the form of awards, national recognition, the simple thank you by a KETRACO staff member... Indeed, it's the simple things that matter in life. Making a difference in the corporate world is definitely a reward in itself. However, this can only be attributed to the focus and discipline imbued during the course of the Project. Understanding the dynamics of the implementation of such projects helps a lot. I have to factor in costs, work load, deliverables and ultimately time allocated and how to manage and mitigate risks.

To deliver on this Solution I had to apportion time and extend work hours sometimes into my weekends. The weekends were great; calmness of KAWI complex and faster internet speeds were a big motivation. Conversely, to ensure deliverables were met I had to focus on the cost implications and manage the same. I never missed a report, sent by 8:30 am to the Project Managers and Project Sponsor.

I learned a lot from this Project as well. Time is the greatest resource of them all regardless of what others may tell you. As we applaud Eliud Kipchoge for his INEOS Challenge (1.59), I wonder how many of us plan to such precision for success? Guard your time jealously and use it appropriately.

Ultimately, the project was finalized with the training of KETRACO's staff over the course of 4 weeks here in Nairobi. However, learning is a continuous process. Our Team helped equip more than 150 staff with the knowledge required to undertake enterprise system use and unlock their spatial thinking to new possibilities. We are also spearheading digital transformation at KETRACO by automating most if not all their business processes.

My hope is to inspire the younger generation to want to be better and do better. Through focus, hard work and discipline can we achieve much more and therein does a diamond shine bright.

I described myself as a pragmatic, bare-bones champion.

Patience and perseverance are key to the success of any project and in life.

KETRACO's core business; transmission line engineering planning, design, construction, and maintenance.

The weekends were great; calmness of KAWI complex and faster internet speeds were a big motivation.

Guard your time jealously and use it appropriately.

Our Team helped equip more than 150 staff with the knowledge required to undertake enterprise system use and unlock their spatial thinking to new possibilities.

My hope is to inspire the younger generation to want to be better and do better.



KETRACO staff during an ILIS training at EKA hotel

ANCIENT EGYPTIANS DISCOVERED ELECTRICITY THOSANDS OF YEARS BEFORE NIKOLA TESLA.

By Calvin Nyagudi

British playwright Ben Johnson once stated that “curiosity killed the cat.” But then again curiosity ignites investigations which unearth truths that have been buried for thousands of years. To date, controversies still persist as to who or where electricity was first harnessed.

Some think of Benjamin Franklin, Nikola Tesla and others from the north yet many others raise the point about electricity having been in ancient Egyptian pyramids.

To start us off, permit me to correct many regarding the belief that electricity was invented. Electricity being a natural force has been in existence since time immemorial. It therefore did not require any invention but to be discovered, understood and harnessed.

There is not even one iota of doubt about the ingenuity of Benjamin Franklin. He was one of the greatest scientific minds of his time. He had great interest in many areas of science and in the mid-1700s, he became interested in electricity.

It is worth mentioning that Franklin came up with the idea that electricity had positive and negative elements between which electricity flowed. He also believed that lightning was a form of this flowing electricity and through his kite experiment in 1752, he proved his hypothesis.

Building upon his work, many other scientists studied electricity. But deeper research directed us to the findings that scientists like William Gilbert (father of electrical engineering) and Sir Thomas Browne scrutinized electricity way before Benjamin Franklin. This brings to perspective the question about who first discovered electricity.

Furthermore, more scientists have found evidence that ancient civilizations may have discovered and used electricity. Unfortunately, little is mentioned about the discoveries made in Africa. Yet there is an avalanche of evidence to prove that electricity existed in the Egyptian pyramids thousands of years before Nikola Tesla designed the alternating current (AC) electric system.

This evidence would definitely challenge the assertion by some that Africa has been a dark continent with a “non-scientific class.”

A walk through the history of electricity in ancient cities is of great importance.

The ancient Greeks discovered what is now popularly referred to as static electricity when they rubbed fur on amber and that caused an attraction between the two.

In ancient Rome, archaeologists discovered pots with sheets of copper inside. These may have been ancient batteries meant to produce light. Similar devices were discovered in Baghdad giving an impression that the ancient Persians may have used early forms of batteries.



Franklin Benjamin; His experiments clarified the connection between electricity and lightning.

Broader inquiries have led scientists to the Egyptian pyramids. Curiosity has been present when trying to figure out how ancient Egyptians achieved fine quality of gold plated merchandise. A plethora of questions exist about how the men and women of Egypt powered their yarn manufacturing factories and weaving plants.

How, for example, did the ancients in Egypt achieve their impressive artistic and technical excellence in total darkness deep inside the tombs?

This bears comparison with Tesla’s alternating current discovery. At the 1893 Chicago’s World Fair, he transmitted alternating electric current through his body to light a hand-held cable-free bulb in a similar fashion to what is believed to have been practiced by the ancient Egyptians.

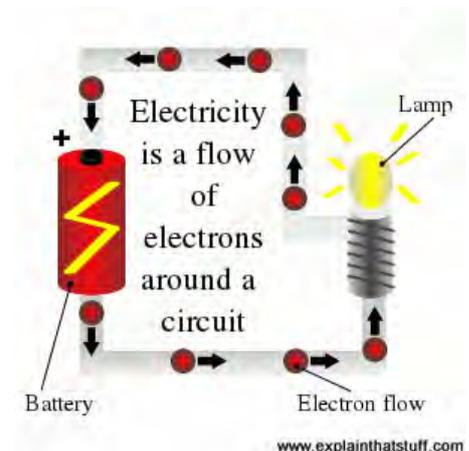


Ancient Egypt had light bulb - Wikipedia

Similarities abound between Tesla’s famous Wardencliff tower technology and the technology employed 5,000 years ago within the Egyptian pyramids. Tesla’s tower, built above aquifers between 1901 and 1917 was identical to that used in the pyramids.

Both systems generated negative ions that were transmitted from the aquifers to the towers and pyramids where current was generated. The transmission in both cases were wireless. Egyptians further used a wireless antenna and cable free energy for wireless communication.

It is therefore expected that with these examples, many will still argue as to who or where electricity was first discovered. But what is certain is that Africa and many other civilizations discovered electricity thousands of years before Benjamin Franklin flew his kite.



- Wikipedia

SUBSTATION ENERGIZATION PROCESS

HIGH VOLTAGE PROJECT TO IMPROVE QUALITY, RELIABILITY OF POWER IN WOTE TOWN

By Winfred Mwende



High voltage project to improve quality, reliability of power in Wote Town

WOTE 132/33kV Substation was energized in January 2019 after successful implementation of the construction, pre-commissioning and commissioning phases of the project.

The substation has four outgoing feeders to the Town centre, Kaumoni, Kathonzweni and Kola environs. The incoming 132kV line feeder to the substation is from Sultan Hamud Substation.

The energization of the substation is a great milestone in Makueni County and especially the nearby Wote town which is a developing economic hub. The greatest impact of the energization has been the improved quality, stability and reliability of power in Wote town and its environs hence contributing positively towards Sustainable Development Goal 7. These areas had for a long time experienced power instabilities hence the lack of energy security.

Prior to the energization, the activities that led to the successful implementation of the substation were: Detailed Engineering Design, Foundation works, Erection works for the various switchyard equipment as well as the pre-commissioning and commissioning tests.

Electrical testing of the equipment at site was done so as to ascertain the proper functionality of each component in the substation in accordance with the design and technical specifications.

The Commissioning tests were done on various electrical systems such as: Protection and Control System, Telecommunication system, SCADA system, LVAC/DC system and the Substation Automation System (SAS) among others.

The successful energization of Wote substation has improved the transfer capacity of power and addressed the challenge of low voltages, high transmission losses, unreliability of supply and network security.

The Sustainable Development Goal 7 aims at ensuring access to affordable, reliable, sustainable and modern energy for all. Energy is an integral part of each sector in an economy. To fully realize its growth potential, Wote town and its environs needed affordable and reliable energy as well the infrastructure to ensure that it is delivered affordably, safely and consistently to households and businesses.

The increased and improved energy access will lead to improvements in healthcare, education, life expectancy and economic opportunities. As a benefit of the project, Makueni County will attract industries and high level commercial operations to spur economic development and increase the incomes of its people. The power transmission infrastructure at Wote town will allow the Rural Electrification and Renewable Energy Corporation (REREC) to carry out the last mile connections to homes and institutions to the environs in need of power supply from the national grid.

COMMISSIONING PROCEDURE

The commissioning procedure is the general guideline that each engineer at FirstEnergy uses during the commissioning process. The procedure identifies a practical sequential approach that can be applied to every project. By following the individual steps, and applying all those which are applicable, the engineer insures that the commissioning process is always performed in a consistent and methodical manner. The steps of the commissioning procedure are as follows:

- Review print package
- Confirm R&I (Relay and Instrumentation), AC, & DC schematics
- Confirm all demolition (Demo) prints • Identify all additions and removals
- Mark prints to reflect functional test path requirements
- Mark prints to reflect voltage confirmation test requirements
- Develop a custom Checkout Guide
- Meet with all on site employees and inform them that you are the ONLY on-site authority for making any changes to the prints or relay settings
- Deliver Checkout Guide to job site and affected crews
- Confirm relay and associated CT settings
- Perform new benchmark electrical equipment testing
- Perform new CT testing
- Perform CT current pushes (must be witnessed)
- Perform functional testing on all required paths (must be witnessed)
- Confirm test switch operation via negative confirmation
- Perform voltage confirmation testing
- Re-confirm proper relay settings are in correct relays
- Determine proper switching sequences and communicate with transmission and distribution dispatching authorities (TSO/DSO)
- Review all test data, Checkout Guide steps, and switching orders
- Perform switching (must be witnessed)
- Obtain load angles as required (must be witnessed)



KETRACO staff during the LSTL Project Commissioning event.



A section of KETRACO staff at the LSTL commissioning event follow proceedings



KETRACO Chairman, Hon. Eng. James Rege, CBS (Center) confers with an official of Liquid Telkom (right) and a customer (right) after a joint Liquid/KETRACO stakeholders meeting at Olesereni hotel, Nairobi. Liquid Telkom has signed an agreement to lease KETRACO fiber.



KETRACO Managing Director, FCPA Fernandes Barasa assists customers at the Company's main reception on ground floor. The MD led the staff in marking this year's customer service week whose theme "behind the smile" resonated well with KETRACO's Core Values.



Energy PS, Dr. (Eng.) Joseph Njoroge, CBS confers with Prof. Izael Da Silver, DVC Research Strathmore University (Center) and KETRACO MD, FCPA Fernandes Barasa, OGW (Right) at the inaugural KETRACO Research and Innovation Conference venue.



Cabinet Secretary, Ministry of Energy Hon. Charles Keter, EGH, officially breaks the ground for the construction of 400kV Konza - Isinya Transmission Line Project on November 14th, 2019 at Konza Metropolis.

THREE ENERGY SECTOR AGENCIES IN JOINT CYBER SECURITY AWARENESS TALK

By Brenda Kemboi



Senior ICT Managers from National Oil, KETRACO and GDC with Kenya CyberSecurity and Forensics Association (KCSFA) officials at the training.



A section of participants at the joint cyber security training.

The Kenya Electricity Transmission Company (KETRACO), Geothermal Development Company (GDC) and National Oil staff underwent a joint cyber security training on October 15th, 2019 to mark the cyber security month.

The discussions centered on cyber threats, where it was explained that a cyber threat is a violation of security, which exists when there is a circumstance that could breach security and cause harm. It is a possible danger that might exploit vulnerability.

Cyber security are techniques of protecting our computers, networks, programs and data from unauthorised access or attacks that are aimed for exploitation. Network security includes activities to protect the reliability, integrity and above all safety of the network. We got to learn that anyone could be a victim of cyber-attacks. As an individual, an organisation, or even a company.

Some of the common cyber threats discussed include hacking, data leakage, malware (computer programs designed to infiltrate and damage computers without the users' consent), phishing and ransomware.

Ransomware is a form of malicious software which attempts to encrypt ones' data then extort a ransom to release an unlock code. The disadvantages that come as a result include violation of privacy, data loss that could lead to a business demise, losing of personal and sensitive information among others.

Among those who attended the occasion were KETRACO Ag. General Manager, Strategy, Research and Compliance Ms. Mumbua Giati, GDC Ag. Manager Information Communication Technology Ms. Diana Langat, Chairman Kenya Cyber Security and

Forensics Association (KCSFA) Mr. Kevin Agira. Others were Infrastructure Network Engineer Mr. Simon Gitau, Mr. Reuben Lagat a member of KCSFA and User Awareness and Training group leader Mr. Allan Lwala, David Kariuki from the IT Department KETRACO and Vice Chairman KCSFA Mr. Fredrick Wahome.

Security awareness is the combination of knowledge with attitudes and behaviours that work to protect our information assets. When one understands the threats and has the capacity to take the right steps to prevent them, it means he or she is cybersecurity aware.

Cyber security is essential for one is able to protect themselves from viruses, hackers, malware among others. Some of the cyber security techniques to keep hackers away include using of encryptions, keeping our Antivirus programs updated, always having our privacy settings on, making sure our internet connection is always secured, choosing strong passwords among others.

"For example, in the case of choosing passwords, having our pets' names, our birthdays date or any other obvious information as our passwords is highly discouraged. This is because it would be easier for a hacker to make a guess," said Wahome.

There are several benefits of managing cybersecurity. Some of the benefits includes improving company credentials with correct security controls in place, having an improved information security and business continuity management, protecting networks and data from unauthorised access among others.

Loosing important data, violation of privacy, personal and sensitive information can fall into wrong hands, for example terrorists, exposure to security risks that come with connecting to a large network.

There are some challenges that may come with cybersecurity. For example, firewalls can be difficult to configure correctly, one needs to keep updating the new software in order to keep security up to date, firewalls configured incorrectly may block users from performing certain actions on the internet and so on.

Social engineering was also one of the things discussed. It is an attack vector that heavily relies on human error. Basically, it involves manipulation of people into breaking normal security procedures and best practices in order to gain access to systems, networks or physical locations.

As we were informed, an attacker creates a social situation that encourages a potential victim let his or her guard down.

The cycle runs from information gathering, developing of a relationship, exploitation and finally execution. In that case, we were urged to be discrete in regard to our personal information especially to people we don't have deeper knowledge about.

Children were also mentioned as key targets. Therefore, every parent was urged to be aware of everything their young ones do especially online and above all, have knowledge of their social interaction life. For the purpose of spreading awareness, those who have young ones were asked to always have those discussions with them.

EMPLOYEE TRAINING, PROFESSIONAL DEVELOPMENT KEY IN ATTAINING COMPANY'S CORPORATE GOALS AND OBJECTIVES

By Nancy Mumo



KETRACO staff attending customer service training in the auditorium at the company's headquarters at Kawi Complex

Kenya Electricity Transmission Company (KETRACO) recognizes the need for training and development for all employees.

It is the policy of the company to offer training opportunities to its employees to equip them with necessary skills to improve their work performance and enhance their personal growth/development.

All staff are required to undergo one form of training or other including refresher courses relating to their duties.

Training and development is a broad term covering multiple kinds of employee learning.

Training is a programme that helps employees learn specific knowledge or skills to improve performance in their current roles.

Development is more expansive and focuses on employee growth it seeks to improve future performance, to increase the potential of an employee as well as equip them to better individual its aimed at developing.

Effective training and development programs help an employee to be the right person for the job, having the right attitude and provides growth as well.

The objectives of training are to ensure that skills earned are geared towards the attainment of the Company's corporate goals and objectives, improve the systems and procedures for identifying staff to benefit from available training resources and ensure fairness and equity among staff, strengthen work performance standards and management, ensure that training receives adequate funding from KETRACO, GOK and Donor sources.

It is also aimed at ensuring fair and equitable distribution of training resources according to the capacity building needs of each division/department by pooling together all training resources and ensure sufficiently trained man power is available to meet the current and future needs of the company by identifying those needs and providing appropriate training and development opportunities.

The Company's policy for helping employee development is through the departmental training needs identified and the company may encourage self-sponsored training which is guided by the consideration that the course will enhance the value of the employee and company.

The company also encourages self-development by paying for subscription fees to professional bodies and also an employee may be reimbursed a percentage of the tuition and examination fees upon successful and satisfactory completion.

The Company offers industrial attachments, to students in colleges and universities in partial fulfilment of the requirements for their relevant academic programs.

Internship is offered to fresh college university graduates who may wish to gain technical experience in their areas of specialization.



REGINAH'S PROFESSIONALISM SHAPES MANAGEMENT, STIRS EMPLOYEE CONFIDENCE IN KETRACO

Ag. GENERAL MANAGER, HUMAN RESOURCE AND ADMINISTRATION PROJECTS BRIGHTER FUTURE FOR TRANSMISSION FIRM

By Jack Nduri

Donning a good dressing sense and confident personality – Reginah Kemboi – the Ag. Senior Manager, Human Resource and Administration at Kenya's official electricity transmission infrastructure operator – Kenya Electricity Transmission Company (KETRACO) is the face behind the Company's workforce that has earned recognition from various stakeholders as having professional, young & dedicated employees.

Her striking confidence, sharp eyes and infectious smile, well tucked behind her cool personality, Regina knows how to integrate creativity into daily conversation and procedures such that every employee feels natural about being creative and facilitating productive creativity when interacting with others in the company.

Always punctual, meticulous and industrious, Regina has struck a unique rapport with her staff and handles everyone with utmost respect to an extent one would be at pains trying to distinguish between senior and junior officers.

Her office on ground floor, KAWI Complex, Block B, is always a beehive of activities due to the influx of people both from internal and external – probably passing out as one of the busiest offices in the organization. She emphasizes on "open door" policy.

Employees go to her with myriad issues and suggestions that they have and she is always very receptive. When she is busy, Regina would always specify alternative time when employees can filter in or out of her well-arranged and neat corporate office. She is actually corporate herself.

Her work, however, is not a bed of roses. There are challenges ranging from employee management to technological and technical challenges. Every day is about ensuring having quality workforce in the Company, developing a culture where staff would want to work and experience a sense of belonging. KETRACO has a very young workforce and with the arrival of the millennials in the job market, she explains, one has to think outside the box in order to succeed as manager.

As Ag. Senior Manager Human Resource and Administration one has to learn to be resilient to challenges and always invest in prospects for growth. Planning for the success of the company and performance management also pose great challenges and must be taken seriously.

She has the company's mandate to plan, design, construct, own, operate and maintain the country's high voltage electricity grid and regional power interconnectors indelibly imprinted in her mind as she discharges her daily chores.

On her desk, which is always spotlessly clean and office documents neatly arranged, one would not fail to notice tools of trade associated with Human Resource Management such as KETRACO code of conduct, Employment ACT 2007 and KETRACO Human Resources Policies and Procedures Manual.



Ms. Reginah Kemboi Ag. General Manager, Human Resource and Administration . Kenya Electricity Transmission Company (KETRACO)

The presence of these reference materials and many more are a clear manifestation of the officer's commitment to following procedures and wide consultations as she discharges her duties.

Reginah holds a masters degree in Human Resource from Moi University, a Higher Diploma in Human Resource from the Institute of Human Resource Management and a Bachelors of Business Administration from Kenya Methodist University. Reginah has attended various Management courses both locally and internationally.

Prior to joining KETRACO as Manager Administration, Ms. Reginah worked as Senior Administrative Officer at Kenya Urban Roads Authority (KURA), Administrative Officer at the Kenya Civil Aviation Authority (KCAA) and Kenya College of Communications and Technology (KCCT –Mbagathi), currently Multi Media University. She is a full member of the Institute of Human Resource Management.

She encourages young upcoming employees to remain focused and understand their areas of specialization. This, she says would bolster their performances and expose them to opportunities for professional advancements.

“We try to expose our employees to as many career progression opportunities as we can for the betterment of service delivery and their own professional advancement,” she says.

The era of technology has enhanced more efficiency in employee management and organizational operations. Reginah believes the advent of SAP has made it possible for both the employees and management to efficiently tackle their day to day chores as opposed to previous scenario when things were done manually.



Ag. General Manager, Human Resource and Administration Ms Reginah Kemboi signs a Customer Service Pledge during a customer service week

She sees KETRACO as an employer of choice in years to come given the company’s unique mandate as a transmission giant. As a transmission infrastructure operator, she says, KETRACO plays a pivotal role in the energy sector.

Transmission, she believes, is the pillar of energy sector, evacuating high voltage power and also providing electricity to push both vision 2030 and the government’s Big 4 development agenda.

The operation and maintenance and in particular fiber optic components, she says, have to be seriously looked into as they are the future of the company. Fiber optic has the potential to generate income to sustain the company’s operations.

Outside KETRACO, Regina is a married woman and a mother of four children. She spends her free time with the family, reading and catching up with international news.

Due to her passion for uplifting the less fortunate, Regina would have been, in another life; a doctor or a community worker to help change the society



Ms. Reginah Kemboi during a sporting event at Ruaraka



Ms. Reginah Kemboi addressing a staff meeting



We try to expose our employees to as many career progression opportunities as we can for the betterment of service delivery and their own professional advancement.



GOOD WORK-LIFE BALANCE

By Brenda Kemboi



Parts of the brain associated with mental health and function.

Mental health is a person's condition with regard to their psychological and emotional well-being. Work life balance is defined as the lack of opposition between work and other life roles. There's a close relationship between a good mental health and a great work life balance. How we balance our work and life outside work has a way of affecting our mental health either positively or negatively. For example, when an individual neglects other aspects of their life because of work, their vulnerability to mental health problems increases. As a person's weekly hours' increases, so do their feelings of unhappiness.

There is significance in work life balance for it allows an individual to separate work and their personal life. This means that the stress of work stays at work and not follow you outside office hours. One of the primary indicators that you are not achieving a work life balance is when work related stress infiltrates your home.

Having a good work-life balance helps keep an individual healthy, gives them quality time with family, time for self-improvement, helps one have a better work performance, helps one achieve fulfilment of happiness among others. There are several ways in which an individual can find balance in life. These includes, reviewing ones' schedule and removing any activities that drain you, being willing to engage in team work, breaking large projects down into several tasks among others.

Mental health problems and stress can exist independently. Individuals go through work-related stress, without having anxiety, depression or other mental health problems. Work-related stress and mental health problems often go together and the symptoms can be very similar. In some instances, aggravates an existing mental health problem, making it more difficult to control.



KETRACO staff attending AON health talk

Good stress management is important in the workplace. While some workplace stress is normal, excessive stress can interfere with your productivity and performance, impact your physical and emotional health, and affect your relationships and personal life. It can even determine success or failure on the job. If one often experiences feelings of stress, he or she might be at the risk of developing a mental health problem, like depression or anxiety which in turn can make existing problems worse. Building resilience can help an individual adapt to challenging circumstances.

Symptoms to mental stress include moodiness, detachment, memory problems, difficulty in making decisions, reduced energy among others. According to Sainsbury Centre for Mental Health, 2007, one seventh of the days lost due to mental health problems are attributed to work related mental illness. As much as work can be stressor for some people in some cases, a recent comprehensive review of the research (Waddell and Burton, 2006) concluded that work is beneficial to health and wellbeing, placement in work improves the health and psychosocial status of some individuals among others.

Although work related stress can lead to physical and mental health conditions and can aggravate existing conditions, it can be tackled. By taking action to remove or reduce stressors, individuals can be prevented from becoming ill and avoid those with an existing condition becoming less able to control it.



KETRACO staff undertaking team building exercises

SERVICE DELIVERY CHARTER

The Kenya Electricity Transmission Company and its staff are committed to providing high quality service to all our customers and stakeholders with dignity, professionalism and within the shortest time possible.

VISION STATEMENT

"To be a world-class electricity transmission company and the leading inter-connector in Africa".

MISSION STATEMENT

"To provide reliable, efficient and effective electricity transmission and promote power trade for sustainable socio-economic development".

TYPE OF SERVICE	SERVICE RENDERED	CUSTOMER/STAKEHOLDER REQUIREMENT	RESPONSE TIME	CHARGES
Customer Service & Complaints	Customer Service	Communication of Issue	With 24 hours of receipt of communication	Free
	Management of Complaints/Compliments	Complaint/Compliment	Acknowledge immediately & respond within 14 days	Free
Procurement	Procurement	Prequalification, purchase of tender documents, sealed bids, supply of goods & services	30 days	Not more than Ksh. 5000
	Payments	Relevant documentation	30 days or as per the contract terms	Free
Line Trace & Land Acquisition	Land/Trace Acquisition	Valid ownership documents	90 days	Free
	Crop compensation	Proof of ownership/letter from local administration	90 days	Free
	Resettlement	Ownership and consent	12 months	Free
	Loss of use compensation	Ownership and consent	90 days	Free
	Structures compensation	Ownership of consent	90 days	Free

WE ARE COMMITTED TO COURTESY AND EXCELLENCE IN SERVICE DELIVERY.

Any service that does not conform to the above standards or an officer who does not live up to the commitment to courtesy and excellence in service delivery should be reported to the Managing Director & CEO, Kenya Electricity Transmission Company or any other Senior Officer of the company.

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TRANSFORMING THE NATION'S ECONOMY



**Building and maintaining the national grid to ensure
sustainable development for Kenya**