GENEWS

THE OFFICIAL NEWSLETTER OF UEGCL **Issue 1 2017**

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Concrete placement at one of the sections of the Karuma Hydro Power Project

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ISSUE 1 2017

From the CEO

Eng. Dr Harrison E MUTIKANGA

In this, our first edition of what we believe shall be an exciting periodical publication GENEWS, you will read about the tremendous steps we are taking in delivering our Vision and Mission. "To be the leading power producer in the Great Lakes Region" and "To sustainably generate reliable and affordable electricity for socio-economic development," are our Vision and Mission respectively. Suffice it to say that these have included; a robust buttressing of our Human Resources, unrelenting Contract administration of the flagship projects, strategic partnerships with key stakeholders in financing and academia, the quest for ISO certification in tandem with international best practices, and a rebrand of UEGCL etc. As you will deduce from this publication, ours is a continuous quest in finding the right balance between internal and external processes, underpinned by performance management in all our processes, and cordial partnerships with all our stakeholders both internal and external. As is the case, our aspirations are appended to the National Strategic Policy guidelines as enshrined in the National Development Plan II, the Vision 2040, and H.E the President's Manifesto, all which are geared towards transforming Uganda's economy from a predominantly peasant to a middle-income status. The President's message on the need for affordable and reliable electricity cannot be more emphasized.

Last year was quite an eventful one for us at UEGCL and was pivotal to the implementation of our 3-year Strategic Direction (2015 – 2017). In the first year 2015, our activities were focused on laying the foundation for the implementation of the Strategic Direction, and this was followed by a full blown implementation of the Plan in 2016.
It's all hands on deck in as far as our core mandate of ensuring the efficiency of the Kiira/Nalubaale Hydro-power complex through the effective monitoring of the concession. The complex currently under ESKOM operates at an average of 97% to 99%, despite the challenges associated with an aging structure. We have, in the pipeline, short and long term investments planned to ensure the posterity of this strategic national asset.

Despite the challenges we faced with quality assurance issues on the flagship projects of Karuma (600 MW) and Isimba (183 MW), I am glad to report that significant progress was realized in these projects. Both are over 50% in terms of physical construction, and a picturesque impression tells it all. Indeed the challenges were an opportunity which rallied all stakeholders to seek amicable solutions to mitigate the looming catastrophe. Our current focus is to ensure that the projects are implemented taking into account the three elements of Quality, Cost and Time.

Beyond Karuma and Isimba, I have the pleasure to inform you that progress on the Muzizi (44.7MW) and Nyagak III (5.4MW) is looking good with the bulk of the civil works slated to commence next year. We are also prospect-

ing with a couple other small hydros in line with our policy of diversifying our Generation portfolio to include plants that can serve the needs of the remote and rural areas. As a Company, we have also made the first steps towards implementing our Energy mix strategy to include other renewable energy sources such as Solar and Geothermal.

A key milestone during the year was undertaking of preparatory plans for the eventual Operation and Maintenance (O&M) of the flagship hydro-power plants under construction. This culminated in the Board approval of an O&M Strategy and Business model which is indigenous in nature and will result in efficient and cost effective operations capable of ensuring that UEGCL meets all its obligations including debt servicing of loans.

In partnership with the private sector, our goal is to increase the installed generation capacity to such levels as to make the ambitious NDP II Goals realistic. For Uganda to attain middle-income status by 2020, the NDP II has set targets for electricity access at 30 per cent and average consumption at 578 kWh per capita. Currently these stand at 20.4 per cent and 80 kilowatt-hours per capita (kWh per capita) for the financial year 2012/13 respectively.

To achieve these numbers, the Uganda Government needs to prioritize and fast-track the development of the proposed four cascade hydro-power plants along the River Nile, that is, Ayago (840MW), Oriang (392MW), Kiba (288MW), and Murchison (648MW).

The experience UEGCL is garnering from Karuma and Isimba serves to make us the natural implementing agency on all these projects.

The above successes, plans, and prospects have been registered and hope to be achieved through strategic partnerships with our stakeholders who are both state and non-state actors. We remain indebted to the technical and other assistance from the Electricity Regulatory Authority, Ministries of Finance, Planning and Economic Development as well as that of Energy and Mineral Development. In a special way, I wish to recognize and laud the development cooperation from our partners KfW, Afd and the Norwegian embassy. The rather uphill tasks of our contractors, consultants, and supervisors at the various sites cannot be over emphasized while the local government and communities where our projects are located continue to be ever hospitable to our site teams and supportive to our project development. I thank you!

On the Governance perspective, our former Board Chairperson, Dr. Stephen Robert ISABALIJA was appointed Permanent Secretary at the Ministry of Energy and Mineral Development. We congratulate him and we are glad his vast responsibilities include our operations. This resulted in a change of guard in our Board of Directors which is now fully constituted and is headed by the indefatigable Eng. Proscovia M. NJUKI. I wish to congratulate and welcome aboard the new members Eng. Gilbert KIMANZI, Mr. Ronald DRAVU and Omunyoro Zachary Mosimoson BAGUMA. Congratulations are also in order for the old members upon renewal of their term in Office. These are Ms Zeridah ZIGITI, Mrs Jennifer Katagyira LUBAALE and Dr. Nixon KAMUKAMA. We look on with great anticipation for your strategic guidance in attaining our set goals.

At the end of last year, we took domicile in our new home located in Victoria Office Park in Kamwokya, in Kampala. Government continues to grapple with rent for many of its Ministries, Departments and Agencies –not with UEGCL. At our last Annual General Meeting, the shareholder (Ministry of Finance, Planning and economic Development) was glad to give us a clean bill of health, as a profitable government agency. We pledge to remain that way.

In summary therefore, while last year (2016) was the fulcrum to the implementation of our Strategic Plan, we envisage that the year 2017 will see us realize some of the fruits of the seeds sowed in 2016. We thank all our stakeholders for the support given to us, and pledge our commitment to further contributing to the Governments development objectives by ensuring reliable and affordable power to all sectors.

Enjoy this magazine.

Editorial

In spite a recent reduction in the end user tariff announced by the Electricity Regulatory Authority ERA, there remains the cry and hue over high electricity prices from domestic to industrial consumers. Coupled with the decried high cost is the reliability of supply that some consumers experience. Against the backdrop of the fact that there is a higher installed generation capacity than the peak time demand, all manner of explanation as to why the consumer has power sometimes and at a high cost always lands flat on its face.

Yet, on our end, UEGCL has and continues to do the heavy lifting in ensuring the two flagship projects of Karuma and Isimba are delivered - as promised - by close of 2018 (next year!). To attain full contract administration powers over these two projects was no mean fete and neither is what lies ahead regarding completion to operation and maintenance. But we are braced for the challenge. And in this, our first edition of the Bi- annual magazine now aptly called GENEWS, we explore UEGCL's commitment, preparedness and everything in between in achieving the above.

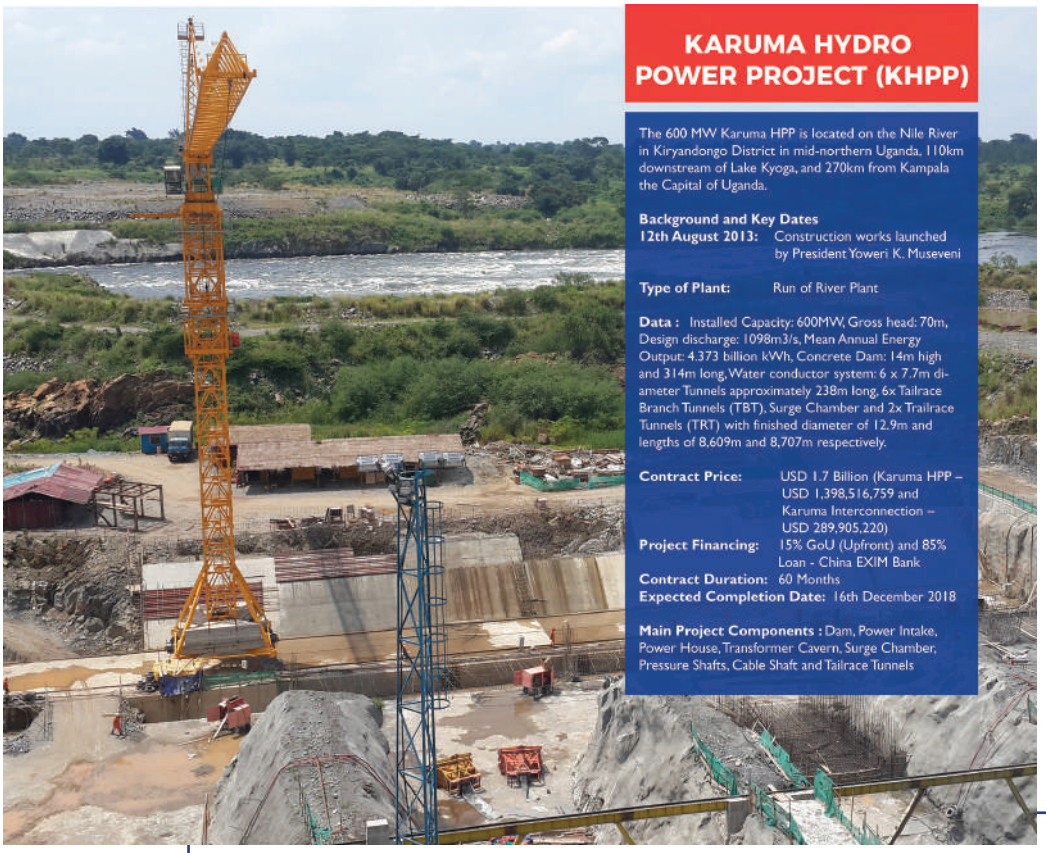
Over the last five or so years, H.E President Yoweri Museveni has been consistent on matters electricity. "Low cost electricity which is reliable only competes with low cost transport in facilitating industrialization," he said in the State of the Nation Address 2015. He has repeatedly said the same thing only packaged creatively different in all subsequent speeches to the nation; I have no doubt the script on the subject matter for the next State of the Nation and Budget Day speeches already has this formed.

Therefore, aware of our pivotal contribution is to the national development agenda, UEGCL is rolling up a number of initiatives in more ways than one, as you will read from this magazine, to deliver on this challenge.

GENEWS, though an internal magazine, is poised to be the industry authority on issues electricity generation as articulated by those at the center of the action. It strives to be the publication of record, the chronicle of the history and the vanguard of technical nuance for the biggest hydro power project in post independent Uganda.

Layback! In all, the magazine aims at being an easy and relaxing read providing both hardnosed technical number crunching as well as a look into the off-duty escapades of our staff corps. The combination of hard work and plenty of play is perhaps what explains why our staff remain arguably the most motivated in the sector and UEGCL as the most preferred employer by any measure. In the last six months, UEGCL prides in being able to attract the best talent in the market with the promise of retention though among other measures a well facilitated career path of growth and development. And so as we build the country's electricity generation potential, we are growing the human resources capacity in the sector passing on skills from one generation to the next, Generating for Generations.

Simon Peter KASYATE
Manager, Corporate Affairs.



KARUMA HYDRO POWER PROJECT (KHPP)

The 600 MW Karuma HPP is located on the Nile River in Kiryandongo District in mid-northern Uganda, 110km downstream of Lake Kyoga, and 270km from Kampala the Capital of Uganda.

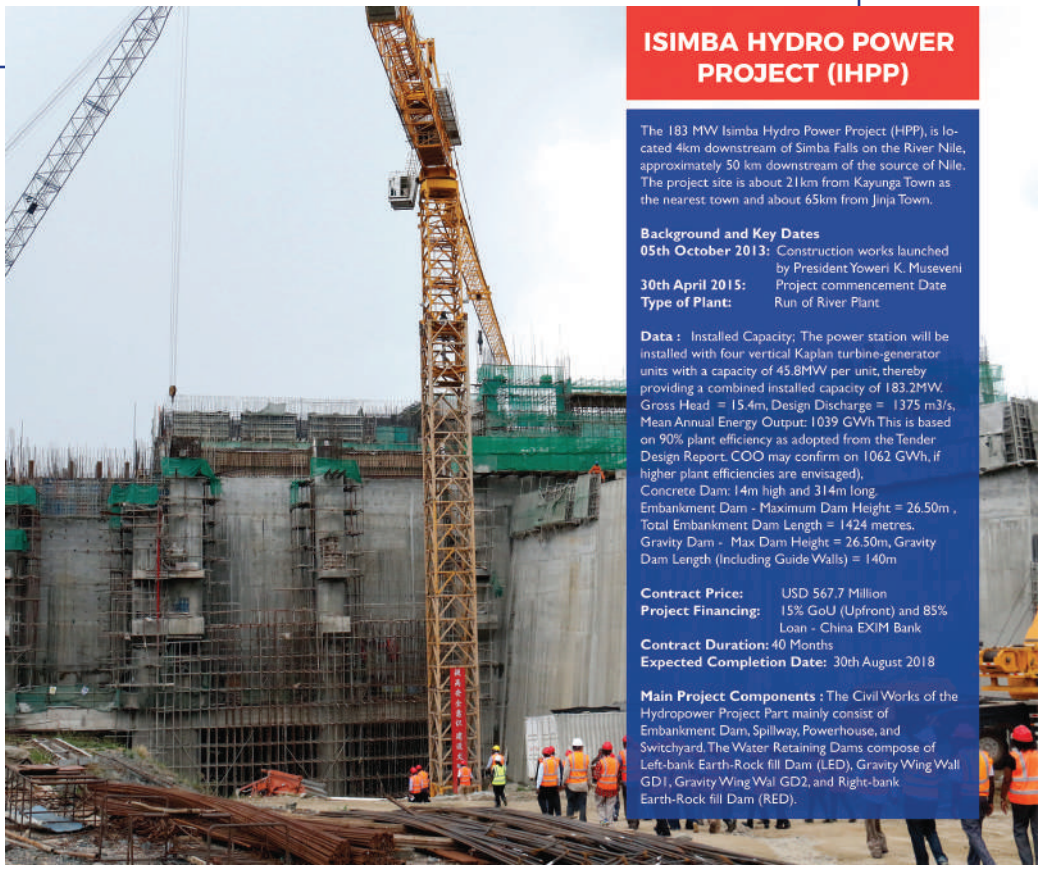
Background and Key Dates
12th August 2013: Construction works launched by President Yoweri K. Museveni

Type of Plant: Run of River Plant

Data : Installed Capacity: 600MW, Gross head: 70m, Design discharge: 1098m3/s, Mean Annual Energy Output: 4.373 billion kWh, Concrete Dam: 14m high and 314m long, Water conductor system: 6 x 7.7m diameter Tunnels approximately 238m long, 6x Tailrace Branch Tunnels (TBT), Surge Chamber and 2x Trailrace Tunnels (TRT) with finished diameter of 12.9m and lengths of 8,609m and 8,707m respectively.

Contract Price: USD 1.7 Billion (Karuma HPP – USD 1,398,516,759 and Karuma Interconnection – USD 289,905,220)
Project Financing: 15% GoU (Upfront) and 85% Loan - China EXIM Bank
Contract Duration: 60 Months
Expected Completion Date: 16th December 2018

Main Project Components : Dam, Power Intake, Power House, Transformer Cavern, Surge Chamber, Pressure Shafts, Cable Shaft and Tailrace Tunnels



ISIMBA HYDRO POWER PROJECT (IHPP)

The 183 MW Isimba Hydro Power Project (HPP), is located 4km downstream of Simba Falls on the River Nile, approximately 50 km downstream of the source of Nile. The project site is about 21km from Kayunga Town as the nearest town and about 65km from Jinja Town.

Background and Key Dates
05th October 2013: Construction works launched by President Yoweri K. Museveni
30th April 2015: Project commencement Date
Type of Plant: Run of River Plant

Data : Installed Capacity; The power station will be installed with four vertical Kaplan turbine-generator units with a capacity of 45.8MW per unit, thereby providing a combined installed capacity of 183.2MW. Gross Head = 15.4m, Design Discharge = 1375 m3/s, Mean Annual Energy Output: 1039 GWh This is based on 90% plant efficiency as adopted from the Tender Design Report. COO may confirm on 1062 GWh, if higher plant efficiencies are envisaged),
Concrete Dam: 14m high and 314m long.
Embankment Dam - Maximum Dam Height = 26.50m , Total Embankment Dam Length = 1424 metres.
Gravity Dam - Max Dam Height = 26.50m, Gravity Dam Length (Including Guide Walls) = 140m

Contract Price: USD 567.7 Million
Project Financing: 15% GoU (Upfront) and 85% Loan - China EXIM Bank
Contract Duration: 40 Months
Expected Completion Date: 30th August 2018

Main Project Components : The Civil Works of the Hydropower Project Part mainly consist of Embankment Dam, Spillway, Powerhouse, and Switchyard. The Water Retaining Dams compose of Left-bank Earth-Rock fill Dam (LED), Gravity Wing Wall GD1, Gravity Wing Wal GD2, and Right-bank Earth-Rock fill Dam (RED).

Our Board of Directors

Eng. Proscovia Margaret NJUKI

Engineer Proscovia Margaret NJUKI was appointed to the Board of UEGCL on 13th November, 2013 and was appointed Board Chairperson on 11th November, 2016. She has over 30 years' experience after serving at Uganda Television, now Uganda Broadcasting Corporation. She has also served as the Ag. Executive Director of the Gender Advisory Board of the United Nations Commission on Science and Technology for Development (GAB/UNCSTD).
She is a holder of an Honours Degree in Electrical Engineering.

Dr. Nixon KAMUKAMA

Prof. KAMUKAMA was appointed member of the Board of Directors, UEGCL on 6th December, 2012. As a holder of a Doctorate in Business from Makerere University, Prof. KAMUKAMA is proficient in Financial Management and has authored several publications on the same.
He is currently the Deputy Vice Chancellor of Mbarara University of Science and Technology in charge of academic affairs.
Prof. KAMUKAMA is the chairperson of the Finance and Audit Committee and a member of the Governance, Risk and Compliance Committee of the Board.

MS. ZERIDAH ZIGITI

Ms. ZIGITI was appointed member for the Board of Directors, UEGCL on 13th November, 2013. She has over 15 years' experience in economics, policy, budgeting and financial management and is currently the Ag. Assistant Commissioner Infrastructure at the Ministry of Finance, Planning and Economic Development. She holds a Master's degree in Economic Policy Management. She is currently a member of the Board of Trustee Uganda Wildlife Authority and Uganda Trypanosomiasis Control Council.
Ms. ZIGITI is a member of the Technical Committee and the Finance and Audit Committee of the Board.

Mr. Ronald DRAVU

Mr. DRAVU was appointed member of the Board of Directors, UEGCL on 15th September, 2016. He has a wealth of experience in financial management, audit and policy implementation. Prior to his retirement, he served at the Ministry of Local Governments as the Chief Finance Officer, Senior Internal Auditor and finally the Principal Internal Auditor. He holds a Master's of Arts degree in Organizational Leadership. He currently serves on the Board of Uganda Christian University-Arua Campus. Mr. DRAVU is the Chairperson of the Governance, Risk and Compliance Committee and a member of the Finance and Audit Committee of the Board.

Eng. Gilbert John KIMANZI

Eng. KIMANZI was appointed member of the Board of Directors, UEGCL on 11th November, 2016. He has over 25 years' experience in the water and sanitation sector. He is currently the Assistant Commissioner (Planning and Quality Assurance)-Water for Production in the Ministry of Water and Environment.
He is a holder of a Master's Degree in Water and Waste Engineering. He is a registered Engineer and is a member of the Ugandan Institution of Professional Engineers (UIPE).
Eng. KIMANZI is the chairperson of the board Technical Committee and the Board Human Resources, Compensation and Planning Committee.

Mrs. Jennifer Katagyira LUBAALE

Mrs. LUBAALE was appointed member of the Board of Directors of UEGCL on 12th September 2007. She has over 15 years' experience at senior management and administrative levels, her areas of specialism being Public Sector Reform and Public Private Partnerships.
She is currently the Team Leader, Parastatal Monitoring Unit at the Ministry of Finance, Planning and Economic Development. She holds as Master's Degree in Business Administration.
Ms. LUBAALE is a member of the Human Resource, Compensation, Planning and Governance, Risk and Compliance Committees of the Board.

Mr. Zachary Baguma Mosimoson ATWOKI

Mr. ATWOKI was appointed member of the Board of Directors, UEGCL on 4th May, 2016. He has over 28 years' experience in the Earth Sciences field and has a wealth of experience in managing, executing, exploration, investigation and evaluation of geological and engineering programs.
He is currently the Commissioner, Geological Survey Department at the Ministry of Energy and Mineral Development. He holds a Master's of Science in Geological Surveys and a Master's of Science and Mineral Exploration. Mr. ATWOKI is a member of the Technical Committee and the Human Resource, Compensation and Planning Committee of the Board.

Us and Social Media.

By Noella NSABA

Many people have now and again asked whether social media enhances the outlook of an organisation or company and the answer is YES.
Social media can be referred to as online platforms where people share information, share ideas, discuss trends, send pictures and messages.
It comes in different forms and platforms, including blogs, Facebook, Youtube, Snap Chat, Instagram and Twitter among others. The most popular social media site in Uganda is Facebook with an estimated 2.2 million users as at end of June 2016. An organization like UEGCL understands that social media platforms are worth exploiting as a communication tool.

Many people continue to ask whether social media enhances the outlook of an organization or company; the answer is YES.

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Through our Twitter and Facebook pages, we are able to provide constant updates to our followers in the developments on the several projects and also in the energy sector. The news cycle and landscape is changing with social media. There is a yearning for information and companies should be ready to respond – where necessary. The days of only waiting for traditional media to deliver the news are gone and constantly updating people online is also important.

Management of a company's reputation can be done through social media. Social media channels, for example, Twitter and Facebook are used for tracking and seeing what is being said about an organization and its services. Here we can derive responses or even adjust the way we operate.

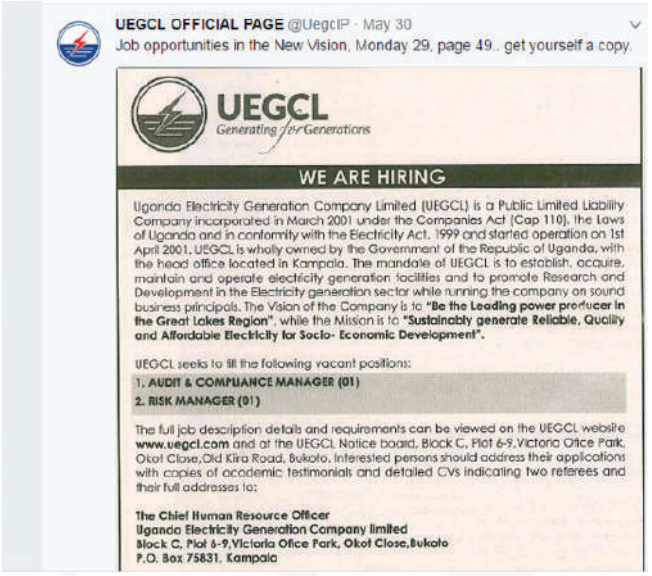
Social media encourages thought leadership for different company employees; once the employees grow stronger in their leadership quality, so will the company. Posting insightful and well-written content on social media on behalf of the company is a great way for employees especially the top managers to become experts and leaders in their fields of work. Mr. Harrison MUTIKANGA, our CEO uses Twitter to update followers on what is going on at UEGCL and other developments.

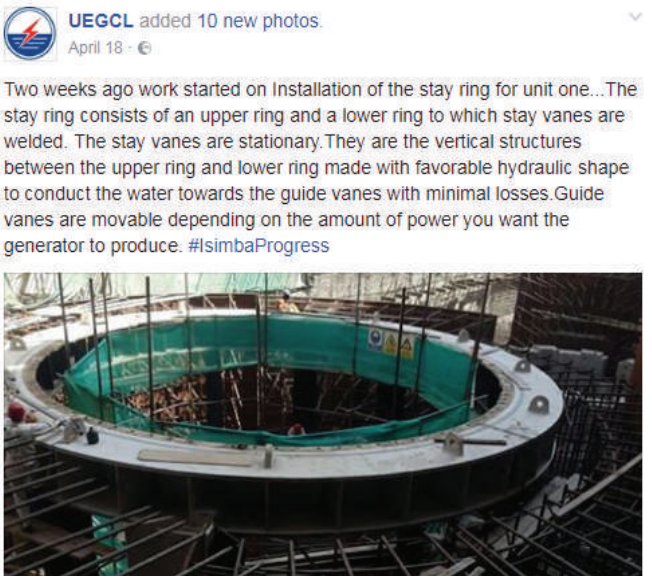
Social media offers a multitude of channels to share success stories that distinguish a company and its various achievements. These success stories provide an inside look at the operations of the company and the different personnel while reinforcing the clever and innovative roots of the company along with the various accomplishments.

Through social media, marketing costs are cut which saves an organization a lot of money. Compared to the traditional channels like print advertising; that is to say magazines and newspapers, social media marketing is affordable. We are able to use the platforms to post contracts, tenders and job offers for people and companies to apply – at no cost.

Social media has the ability to improve customer service and satisfaction. The happier the customer the more likely an enduring customer – company relationship will result. A company as a whole can monitor the social sites, proactively engage with the customers and address inquiries or complaints. Since social media is a great feedback source, the outside publics of a company communicate actively with the company itself. Customer service is greatly improved and delivery of service trustworthiness is increased.

In conclusion, the effective use of social media can help grow a company and ultimately increase its value, when managed and executed strategically and efficiently..





Geotechnical Engineering Expertise

By Joan ONGODIA

I am employed as civil engineer with Uganda's best employer – the Uganda Electricity Generation Company Limited (UEGCL). Having worked for UEGCL since mid-April 2012, I left Uganda for the University of Cape Town (UCT) in South Africa to pursue a two-year master's course in Civil Engineering with Geotechnical specialization on 4th March 2015. Practicing civil engineering was exciting. There were numerous travel and networking opportunities available, including learning from both local and international experts. With the ground breaking for Uganda's largest-scale Hydro-power Projects taking place, more career and professional growth were anticipated. However, therein lay a snare for me as an individual, for my employer as an institution and also for the country as a whole because of the lack of geotechnical expertise (geotech in short).

The intricate nature of hydro projects is indicated by voluminous capital-intensive geotechnical investigations and studies that should precede any decision to develop an electricity generation facility. As such the need for in-house geotechnical engineering knowledge was critical. Without a doubt, the necessary skills were required urgently whether through external sourcing or in-house training. Sourcing confirmed scarcity since there are generally few geotechnical experts worldwide besides only two modules (soil mechanics and foundations engineering) of a civil engineering undergraduate degree, are closely related to geotech. In any case, the two modules could only be applied within soil depths and not in rock. Therefore, leading global universities have recently introduced a module on rock mechanics to bridge the skills gap to meet needs of the mushrooming underground construction industry including tunneling, among others. Karuma which is Uganda's largest Hydro-power Project has six tunnel components, and more tunnels and underground structures are expected both in the near and far future.

My roles at UEGCL included checking project documents, reviewing consultant and contractor reports/work, throughout the project life, in order to highlight any technical issues pertaining to proper project function according to the intended purpose and design service life. Considering the responsibility and my personal limitations as a graduate civil engineer, I was concerned that I was incapable

Rock mechanics field visit to Lake Country wine tunnel, BC, Canada (April 2017)

Social engineering (a) playing 'Jenga' after a long week at UBC (January 2017)

After block weeks at UCT
Slope stability course (March 2015)

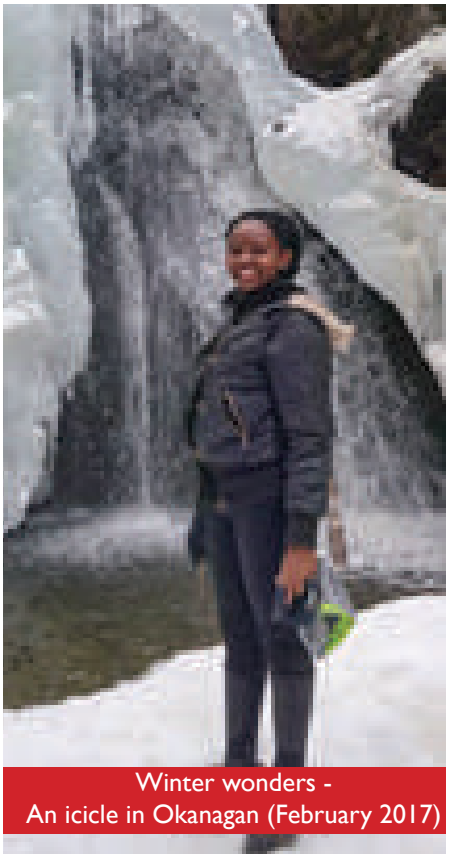
of protecting my country's best interests and the tax payers' money through naive judgement and offering 'less than best' counsels.
After failed attempts at securing postgraduate funding abroad, I was awarded a Julian Baring scholarship to pursue my dream specialization in February of 2015, through my former supervisor Dr. Denis Kalumba of UCT.
With the guidance, encouragement and support of UEGCL leadership team, I was granted a two-year salaried study leave to enable me acquire the much needed geotechnical skills and knowledge through postgraduate research and coursework masters at UCT as well as a class training on rock mechanics at the University of British Columbia (UBC) in Canada.
Through my twenty-five months long study tenure, I have been taught by competent academics and geotech practitioners who both ably trained and equipped me with the right skills set. Without a shred of doubt, I am now a more competent civil engineer with geotechnical engineering specialization.
I am grateful for the opportunity of in-house training and look forward to putting to use what I have learnt to perform my job, including offering better counsel in order to generate for generations with UEGCL for God and my country. Salute!
Below are some photos to compliment the long read. Thank you!

Ground improvement techniques course (November 2015)

Time out to reunite with family/colleagues on short study visit (August 2015)

Time out to get inspiration at a friend's graduation (June 2016)

Hydro2016 conference, Switzerland (October 2016)



Winter wonders -
An icicle in Okanagan (February 2017)

Preparing to take Charge of Electricity Generation

An Eskom engineer and UEGCL engineers discussing shaft seal system piping system

Ian SEDIRIMBA
Control and Instrumentation Engineer

Recruiting an operation and maintenance team during project phase for a hydro power plant is seldom the case in the energy sector. It takes a strategic management team to fathom the importance of such a decision. Uganda Electricity Generation Company Limited (UEGCL) did just that in September 2016, and hired a team of engineers and technicians to take part in the project phase of both Isimba and Karuma Hydro-power Plants. This decision is based on the strategic direction of the company to build capacity locally in the hydro power sector so that come 2018/2019, our very own Ugandans can take charge of these plants.

The management thought it prudent to give the team a hands-on experience in the already existing plants – Nalubaale and Kiira to help the team appreciate the energy sector overview and operation and maintenance of a Hydro Power Plant. Negotiations were made between UEGCL and Eskom Uganda Limited to accommodate a team of 25 for a period of 3 months at the Nalubaale and Kiira Hydro Power Plant complex. My colleagues and I agree that the three months have been something of

Newly recruited O&M staff during apprenticeship at Nalubale Hydro Power station Jinja

a rollercoaster. An experience we would not have traded for another, an opportunity of a lifetime and a professional challenge we are all too excited to have faced.

Eskom Uganda Limited received and treated us as their own, exposing us to every nook and corner of this facility while holding nothing back in as far as the operation and maintenance is concerned. Apart from our orange overalls, nothing distinguished anyone of us from any Eskom employee, not the equipment and other facilities to do our job, not even the food we are so glad to have shared.

Let me specifically thank the management at UEGCL for the foresight in negotiating this apprenticeship opportunity with Eskom Uganda Limited. That's what visionary leadership means; and we are proud about it. I also wish to thank the leadership of Eskom Uganda Limited for allowing this to happen. It is our strong hope that this strategic partnership between UECGL and Eskom remains and grows in strength for the better of the country's energy sector and the economy as a whole.

Social Risks in HPPs

By Isaac Bernard MWESIGWA

Workers at the Karuma HPP take a stroll after their shift

The construction of hydro-power dams like Karuma and Isimba that will generate renewable and cleaner energy, are increasingly being condemned by many critics, especially on their impact to livelihoods. Previously, lenders looked more at the environmental physical impacts and little attention was placed on social impacts and risks associated with Hydro-power Projects.

In the last five years, the drive for this social critique has improved. New arguments are being used while practical responses to the newly raised social issues are lagging. Certainly, the adverse social impacts and risks of hydro-power dams, if unattended to, can be very severe. Unless the negative social impacts and risks are mitigated by the government of Uganda, developers and planners, through socially sensitive resettlement planning and community rehabilitation, hydro-power expansion will be retarded by social tension and increasing political and environmental opposition.

Hydro-power development involves risks of involuntary land acquisition and forced displacement and resettlement stand out as an instance of risk management at its most exacting and difficult complexity.

This process starts by causing deep social disruption, expropriations and asset condemnation and losses. It is a process of many unknowns and unpredictable events; and it is prone to elicit strong opposition, born out of human suffering.

Careful planning into the major economic and social risks that are embedded in every fabric of the displacement mechanism is required. Furthermore, handling the social risks in displacement and relocation processes is not a confined activity. It is a concern that must run constantly along the entire project timeline process, underpin it, and must be taken up at all levels of management. This makes it necessary to also examine it at each level.

All stakeholder participation and involvement in development initiatives that benefit the host community is key. UEGCL will be implementing the Community Development Action Plan (CDAP) for Karuma and Isimba dams to mitigate or reduce social impacts and risks associated with the construction of the two flagship projects.

In this light, the implications for decision making and design of dam projects involving displacement, the implications for how planners think through the project's social impacts are obvious.

This can be empirically examined by reviewing project and policy documents. The identification of social risks must logically be the first premise of any responsible consideration of the social impacts of hydro-power development. That requires risk prediction and analysis as part of the very concept and design of a dam building project.

It also requires open and explicit discussion of risks and counters risk remedies by all stakeholders, planners, implementers, the project area's inhabitants and all the project's beneficiaries. This will be key for upcoming UEGCL projects like Muzizi, Lataro and Okulacere among others!

KHPP's Surrounding Communities

By Simon KASYATE

John Ogwang Odeny is no more than a meter tall and by observation, he weighs no more than 50Kgs. The hair on his head and the dark shadow below his eyes speak of a hard life lived, yet the strength in his voice and the swagger in his step – in sandals made from car tires - exudes an unnerving confidence.

On the day I first met him, he was in the company of about ten men, in a vast empty field where they had recently harvested cassava.

The scorching hot sun, as it has always been in Duciny Village, Juma Parish of Kamdini Sub-county in Oyam district, was upon us as we attempted to ascertain the existence of a piece of land for social investment.

A daunting assignment I undertook partly out of an interesting mix of obligation and curiosity. In Duciny, land ownership is the stuff of a Ph.D. thesis, but to put it plainly, it's owned not by individuals but by families and clans.

And so, any action on land will only succeed with the consensus of majority in that clan. That is what customary land ownership entails.

Here we were, to see first-hand the land that Odeny and others in his village like Francis Ogwang, Chairman Gaetano Opio and his deputy Richard Ekuka had forfeited to UEGCL for the construction of a health facility.

As part of the contract Government of Uganda signed with (Sinohydro), the contractor for the 600 MW Karuma Hydro-power Project.

There shall be two hospitals (one for the military and another for civilians), a school and a bursary scheme in the adjoining geographical location to the project site. These have to be built by the contractor. It makes logical and technical sense to have these facilities within no more than a ten-kilometer radius from the project center.

"My son, if your people need more land for expansion, I will give it to you," He whispered. "You see my time is about done, but this facility shall remain for my grandchildren and their children."

It took months of engagements with stakeholders far and near, large and small to finally arrive at Duciny village. But here we were. What I thought was a small incognito tour of the land to ascertain that it actually existed away from the numerous letters we had received to that effect, I was pleasantly surprised at what i found. From the bushes and shrubs of the village, men, women, and children started to gather around, curious and with a sense of anxiety, I cannot describe.

I asked my very amiable guide, the chairman of the sub-county Sam Ogwang if I can address them.

They did not wait for a translation, they had gathered anyway and clearly, I was not going anywhere without talking to them.

"Ofwoyo binu" (thanks for coming over), said

a lady with a baby strapped on her back, with beads of perspiration that formed a mosaic on her forehead, as she tried to find soft grass next to me to sit.

"Bel", I replied, politely.

And so the conversation ensued, as to why I was in their village.

Sinohydro has benchmarked with the Ministry of Health and for a total cost of USD1.5M, a facility the size of the standard health center IV shall be erected in Duciny. This facility shall have a general outpatients department, a maternity ward, general theater for basic operations, a pediatric ward and general ward. The facility shall also have a three-bedroom doctor's house and some units for the nurses. The funds are meant to equip the center, complete with an ambulance for referrals and emergency rescue.

Sinohydro's plan is to deliver this facility as a 'turnkey', in other words, on the day of the ribbon cutting, it shall be ready to receive its first patient. The target being end of 2018!

The facility shall have running water and electricity in a neighborhood that has never seen these facilities.

Ogwang and the village leaders have all pledged support for this Corporate Social Responsibility (CSR) initiative by Sinohydro and UEGCL.

As I left Duciny, to meet another group of beneficiaries of the Karuma CSR initiatives I made my way to where Mzee Ogwang Odweny who was standing to respectfully bid my farewell.

"My son, if your people need more land for expansion, I will give it to you," He whispered.

"You see my time is about done, but this facility shall remain for my grandchildren and their children."

What a foresighted man! Amaji Primary School, about 2 kilometers from Kamdini Sub-county Headquarters, an existing Government aided school has a student population of over 800 pupils. The welcoming landmark is an almost crumbling church and a classroom structure with walls but no roof. To the far end is a collection of pit latrines, each with inscriptions.

'Built with aid from World Vision'

This is the common wording on all of them.

Talking about vision, the school management committee has a vision for the school, so does the district and by extension Ministry of Education and Sports. However, like hundreds of such Government aided schools in as many nooks and corners of Uganda, funding remains a major bottleneck to the realization of the various visions.

When a request was made by Sinohydro, through UEGCL, for land to build

UPDF shows the Sinohydro and UEGCL team the state of the current health center in Masindi Barracks

Kamdini LC3 Chairperson Sam Ogwang (in checkered shirt) and Mzee John Ogwang Odweny (extreme Left) show the vast expanse of the land the community gave to Sinohydro and UEGCL to build the health facility in Duciny village, Juma Parish of Kamdini.

Artistic impression: Amaji Primary School entrance.

a school, as stipulated by the contract, the district leadership unanimously chose Amaji Primary School. instead of building a new school, they argued rather convincingly, for the conversion of the existing one into a model facility.

That's exactly what is planned for this school. A new administration block, classrooms, multipurpose hall, dormitories for both boys and girls, a pantry, water harvest system, computer lab and library are planned for this school. A headmaster's bungalow and some teachers' houses are also planned and shall be built, complete with new landscaping for the otherwise flat land on which the school sits. This too is expected to be complete by the first term of 2019.

The military, through Ministry of Defense, decided that their military hospital be in the form of a rehabilitation center. The upgrade of the health center will be within the Masindi Military barracks. The Sinohydro team of surveyors and architects have since gone to work and drawings for the above projects have been submitted to the respective district councils for the requisite approvals.
Groundbreaking on the above CSR initiatives is expected mid this year.

Beyond these CSR initiatives, the projects of Karuma and Isimba also have a Community Development Action Plan. (CDAP) fund that seeks to better the lives of the project affected persons in more ways than the restoration of lost livelihoods and alternative source of income. CDAP programming is currently underway led by a team of experts from UEGCL and the Ministry of Energy and Mineral Development. The full plan shall be announced subsequently.
Building Hydro-power Projects is not so much about having the turbines roar and the grid light-up, it is also about improving the lives of those communities adjoin the projects through sustainable projects that attend to such basic needs as education and health.

Artistic impression: Amaji Primary School Administration Block.

Artistic impression: Aerial view of UEGCL CSR project

Group Photo between the UPDF , Sinohydro and the UEGCL team.

UPDF officers led by Brig.Dr. Ambrose Musinguzi, show Sinohydro and UEGCL team a vast expanse of land within the barracks which could be considered for the health center. It was later agreed that instead of constructing a new facility, the old health center be rehabilitated and expanded.

Board Visits Projects

By Cissy NAWATENE

Every Quarter, the UEGCL Board visits the projects for progress assessment. In March, the Board visited Karuma, Isimba and Nyagak.

In November 2016, UEGCL was granted full contract administration powers for the two Government flagship Hydro-power Projects of Karuma and Isimba. The Board's visit were therefore part of the strategic guidance and overall direction to UEGCL in executing this mandate.

Led by the Chairperson Eng. Proscovia Margaret NJUKI, "The Board has noted the Progress so far made, but also observed a few issues that have been brought forward requiring urgent attention by the contractors if the projects should stay on course," said UEGCL Board Chairperson Eng. Proscovia Margaret NJUKI "These include the absence of some much needed specialized expertise on site and the none conformity to agreed repair methods for previously observed cracks," she added.

UEGCL HOSTS THE PUBLIC RELATIONS ASSOCIATION OF UGANDA (PRAU) AT THE 600MW KARUMA HYDRO POWER PROJECT

On Friday 5th April 2017, Uganda Electricity Generation Company Limited through the Corporate Affairs team, hosted the Public Relations Association of Uganda (PRAU) to the 600MW Karuma Hydro-power Project.
This a professional body of communication experts/officers/managers in especially the private sector. As part of their 'knowledge acquisition' activities, PRAU visits different organizations and requests to be hosted for a tour of the country's largest Hydro-power Project, Karuma.

The visit to Karuma with the team of communicators from different disciplines from industry, civil society, non-government organizations, academia, and finance among others;

- Gave an opportunity to a group of our stakeholders to appreciate and understand what we do, how we do

Project Manager Karuma, Albert Byaruhanga (R) takes Board chairperson Eng P.M.NJUKI on a guided tour of Karuma HPP.

UEGCL Board Chairperson (5th from Left) Eng. Proscovia NJUKI, in a group photograph with her and the project management consultants during a tour of Isimba HPP early this year

it and how far we are in terms of project implementation.

- Helped the team appreciate hydro-power as an important driver and a key component of social economic development therefore creating awareness and visibility for UEGCL.

VPS (R) stresses a point to Board members during one of the Board visits to Isimba in Q1.

UEGCL Taking Charge

By Dr. Eng. Harrison. E. MUTIKANGA
CEO- UEGCL

So one may ask: What has UEGCL done so far in this regard? Well, staff recruitment is one of the 'ticked boxes' and they have already been budgeted for in the 2016/17 Financial Year. These new staff shall have the opportunity to apprentice at the construction sites of Karuma and Isimba to appreciate the development of Hydro-power Plants. This is arguably an invaluable experience. It's interesting how brands live on long after their demise. But for UEB (no need to write it in full), we are dealing with a text book case of brands that live on and on for reasons stretching from notoriety to the opposite of it. When the government embarked on an economic recovery model in the late 90s that meant divesture of public parastatals, UEB was in the eye of the proverbial storm. And for good reason. At least as advanced then, divesture of UEB was to improve quality of service, connectivity, reliability, reduce electricity losses, attract private capital investment into the sector and enhance overall sector efficiency.

Indeed, buttressed by a new law, the Electricity Act 1999, UEB was split into three companies: Generation, Transmission and Distribution. To regulate their operations through, inter alia, providing for the licensing and control of activities in the electricity sector as well as to liberalise and introduce competition in the electricity sector, the Electricity Regulatory Authority too was formed.

That's briefly the birth history of Uganda Electricity Generation Company Limited UEGCL, a public limited liability company incorporated in March 2001, starting operation in April 2001. From 2003, and in line with the then government policy, the main role of UEGCL was to oversee the concession of the two available government-owned Hydro-power Plants - Nalubaale and Kiira in Jinja by Eskom. Today, UEGCL's mandate has grown to include establishment, acquisition, maintenance and operation of electricity generation facilities.

UEGCL is the government implementing agency for the flagship Hydro-power Projects of Karuma (600MW) and Isimba (183MW). These two projects, now about 30 per cent complete, are scheduled for commissioning in 2019 and 2018 respectively. Others in line of development include Ayago (840MW), Muzizi (44.7 MW) and Nyagak III (5.5 MW). UEGCL is also currently in the process of securing funding for feasibility studies to develop other small hydros across the country at Okulacere (6.5MW), Latoro (4.2MW), Agbinika (2MW) and Maziba (1MW).

Building hydro-power stations alone may not be the magic bullet in delivering the much-needed electricity as the country spurs for middle-income status as cognisance has to be given to the operations and maintenance, which is pivotal to the efficient and cost-effective delivery of electricity, and this component forms an invaluable input in the tariff build up.

It is in this context that UEGCL is readying to assume the critical function of Operation and Maintenance (O&M) with a vision to be 'the leading power producer in the Great Lakes Region'. This O&M premises on delivering to the country affordable and competitive end-user prices (tariff), utilise and strengthen indigenous capacity (local content) as well as good corporate governance to ensure the projects, now financed with concessional loans, are profitable, self-sustaining and attending to their loan obligations.

The UEGCL O&M model has been approved by the Board and shared with the Ministry of Energy and Mineral Development, and is in line with the aspirations of the National Development Plan (NDP) II and Vision 2040. The model was also largely informed by benchmarking from Kenya's KenGen and other regional and continental utilities.

The envisaged UEGCL O&M business model will focus on attaining efficiency and financial sustainability through sound business principles and ensuring the posterity of the assets. UEGCL, working as the asset holder, will manage the various power plants as independent business units under internal performance contracts. This will ensure operational independence, adoption of private sector tenets of management guided by clear targets for operational efficiency gains, lower tariffs through efficiency gains and help build a bankable conglomerate of hydro-power projects capable of further mobilising and leveraging finance for new power plant developments. The model will also promote internal competition and benchmarking of the various plants, and is within an already formulated training and capacity building programme.

So, there should be no second guessing on whether there is local capacity for operating and maintaining the dams. Like with other government body corporates doing a commendable job in delivering on their mandates, UEGCL is living no stone unturned to rise to this challenge. This is a sign of coming of age for a country, which for the most part, has such strategic operations of national development importance concessioned out.

Karuma HPP in an Ecological Environment

Joseph ASIIMWE
Environmental Officer-Karuma

There is a common sight seen as one leaves the Karuma bridge; the baboons. Wiggling their tails, they cross the roads. Sometimes they jump on top the car bonnets as motorists got them used to bananas. This forms the Karuma Wildlife Reserve but also the greater Murchison Falls National Park, one of Uganda's most popular tourist attractions. Karuma Hydro Power Project (KHPP) is located right in this ecological system is it placed on the River Nile, obviously. Like many other Hydro-power Project worldwide, a dam, if not well conceived and structured has potential of causing negative environmental impact ranging from pollution, waste management, Degradation of land and water resources and loss of biodiversity, among others.

Right from inception, Uganda Electricity Generation Company Limited has been working towards ensuring that KHPP is implemented to ensure minimal interference with the wildlife. The objective is for the project to work towards the sustainable co-existence with the wildlife in the area. How are we doing this?

In 2010, bio-physical and social baselines collected during feasibility studies influenced design changes that favored biodiversity conservation. For instance the Ecological flow increased from 50cum to 100cum. For instance, a fish ladder, a structure that allows migrating fish passage over or around an obstacle on a river, was introduced in the designs. This, enabled the smooth flow of water back into the river, hence mitigating the negative impact on aquatic species due to high flow velocities.

One of the most important processes the project went through was the Environment and Social Impact Assessment, which forms the basis of the 2012 approval by the National Environmental Management Authority (NEMA). Additionally, an Environment and Social Management plan for the project was developed and UEGCL ensured that the Contractor procured domesticated it in project execution by developing specific management plans to manage key environmental aspects (including the Wildlife Management and Monitoring plan).

UEGCL tasked the contractor and the Owners Engineer (OE) recruit competent staff to work alongside UEGCL in implementing the established Environment Management frameworks for KHPP. The Contractor has been supported to carry out EIA's for all support infrastructure. They are also required to acquire permits and licenses from regulatory institutions, which provides conditions for mitigating negative impacts of project activities. Implementation of these conditions (spelt out in the permits and EIA certificates) is being done by the contractor with support from

OE and UEGCL. An Environment Monitoring and Reporting framework has also been established for the project to ensure follow up in line with Ugandan laws.
Specifically under Wildlife and Biodiversity Management, Memoranda of Understanding with Uganda Wildlife Authority (UWA) have been developed to guide access, collaboration & security. Biodiversity Inventories are being done for

A Community Development Action Plan (CDAP) has also been developed with interventions geared to wildlife management like development of a cultural and hydro-museum, problem animal management interventions and tree planting among others.

To achieve smooth implementation and collaboration, a multi-stakeholder engagement plan has been developed where all relevant stakeholders at all

mentation of a Biodiversity offset and CDAP [H1] alongside the continuous environment Monitoring and Auditing of the project are critical during the Operation and Maintenance phase.

In conclusion, UEGCL tagline is "Generating for Generations" and this entails sustainable development of the Hydro-power Project in a manner that our current actions do not compromise

the project area within Karuma Wildlife Reserve (KWR). For instance, economic valuation of the estimated lost biodiversity within (KWR) was completed and currently there's on-going monitoring the impact on biodiversity within the project area - this entails daily recording of wildlife encounters at site and rescue of any wildlife trapped within the project area with support from (UWA).

levels have been brought on board. This platform is conducive to information sharing and timely response to project related issues.
Post construction considerations are being proposed and planned especially in management of downstream flows, ecological flow monitoring, and management of wildlife, sediment and the catchment upstream of the Karuma weir; Dam safety and restoration of degraded sites within KWR. Imple-

the potential of these finite resources to provide the same utility to our future generations. Our core role as the Environment Department here at UEGCL is to ensure that our actions have minimal impact on humans and the environment in which we operate. We are determined to implement the "mitigation hierarchy" on all our project sites with the aim of achieving no net losses but rather net gains in relation to biodiversity and environment management.

Status Update on Isimba HPP- June 2017

By Nicholas AGABA RUGABA
Francis NDYAKURA
Moses MUHUMUZA

The development of the Isimba Hydro-power Station mainly aims to supply electric power. The power station will have an **installed capacity of 183.2MW**, with a multi-annual power output average of 1062 GW•h (Giga Watt hours), and annual utilization of 5800 hours. Isimba Hydro-power Plant is expected to provide reliable electricity and energy output for Uganda and its neighboring countries, producing significant power generation benefits.

Isimba Hydro-power Project consists of Hydro-power Plant with 4 Kaplan turbines (each rated at 45.75MW), gravity and rock fill dams, spillways, access roads, control, workshop and auxiliary buildings and all corresponding infrastructure for safe and efficient use of hydro-power for the production of the electric energy. It is located on the Victoria Nile River some 50km downstream of its source at the location of Koova Island. As part of the project works a 132 kilovolts (kV) substation is to be constructed as well as overhead transmission lines from the plant to the substation with all necessary auxiliary structures and equipment. The Isimba 132kV Substation will be connected to the Grid System at the Bujagali 132kV Substation by 132kV double circuit overhead lines in approximate length of 42km.

The Isimba HPP Project is contracted under the EPC (Engineering, Procurement and Construction) model. The Client/ Owner is Ministry of Energy and Mineral development while Uganda Electricity Generation Company Limited is the Implementing Agency. The implementing agency, UEGCL supervises both the EPC Contractor (CWE) and the Owner's Engineer (Energy Infratech PVT Limed). The Owner's Engineer is in charge of offering consultancy and supervision services for the Construction of the Isimba Hydro Power Project, as contracted by the client.

Financing Progress & Project Duration:

Isimba HPP is financed by both the Government of Uganda and Exim Bank of China. The Government of Uganda contributed 15% of the Engineering, Procurement, and Construction (EPC) cost, while the China Export and Import Bank is financing 85%. **The total EPC contract price is USD 567,738,990.96** (United States Dollars Five Hundred Sixty Seven Million, Seven Hundred Thirty Eight thousand, Nine hundred ninety point nine six only for both the Isimba Hydro Power Project and its Associated Transmission Line Works (Isimba – Bujagali Interconnection Project). The Loan Agreement for the Isimba HPP was signed between China Export and Import Bank and the Ministry of Finance Planning and Economic Development, Uganda on 27th November 2014. The loan agreement was approved by Parliament of Uganda on 12th March 2015, and financial closure was achieved on 20th August 2015. **A total of USD 261,900,549** (United States Dollars Two Hundred Sixty One Million, Nine Hundred Thousand, Five Hundred Forty Nine Only) has been paid to the EPC Contractor as certified by the Owner's Engineer as per Interim Payment Certificate No. 9. **This represents financial progress at 46%.**

The project commencement date was 30th April 2015. The commencement date was set as per Project Implementation Schedule (Revision 6) after EPC Contractor and the Employer agreed on the provisions of financial closure and project land acquisition. The project duration is 40 calendar months. The project completion date is August 2018. As at 30th June 2017, the project is 22 months into its 40 month project duration representing 55% time progress for the project.

Engineering Progress

The Engineering component of the EPC contract accounts for all design aspects of the project. The feasibility design was done and concluded by the Fichtner- Norplan joint venture having been contracted by the employer, Ministry of Energy and Mineral Development, prior to award of the EPC Contract. The EPC Contractor - China International Water and Electric Corporation (CWE). has finalized basic design for all the component structures of Isimba HPP including power house, spillways, gravity dams, EM and HM equipment, switchyard etc. The current progress under engineering covers detailed design for the power house and associated structures. Engineering/ de-

sign stands at over 80% for all civil works and 75% for Electro-mechanical (EM) and Hydro-mechanical (HM) Works. The pending design/ engineering works include second stage diversion scheme, right embankment dam beyond Koova Island, Switchyard and Workshop etc. There are also outstanding design modifications and changes yet to be approved including materials for Electro-mechanical (EM) / Hydro-mechanical (HM) installations like gates, trash racks, trunnion anchors etc. These should be concluded within the next three months before second stage diversion.

Construction Progress

The construction progress covers both civil works and Electro-Mechanical (EM) / Hydro-Mechanical (HM) installation works on site. Regarding civil works, concrete works stood at 95% as at end of May 2017. These are concrete works for power house and associated structures like the gravity dams, spillways, erection bay and control building. Whereas the concrete works have progressed quite extensively, there are major concrete repairs for cracks, joints, formwork ties etc. currently being undertaken by the EPC (Engineering, Procurement and Construction) contractor. These are done with specialized concrete repair materials to ensure durability and integrity of the concrete structures. The placement of embankment dam material for the right embankment dam resumed after the employer authorized resumption of works following the final approval of the design and QA/QC (Quality Assurance / Quality Control) systems for construction of the embankment dam. The foundation treatment remedial works for the left embankment dam are ongoing with EPC (Engineering, Procurement and Construction) contractor now constructing the cut-off wall for seepage control in the dam foundation. The installation works for Electro Mechanical and Hydro Mechanical equipment has progressed extensively over the last six months. both the upstream and downstream gantry cranes have been installed and their requisite load tests have been conducted to ensure compliance to technical specifications. These gantry cranes are critical for installation and operation of the intake gates, emergency gates and draft tube gates of the power house and spillways. The draft tube gates for all the units of the power house are fully installed. The radial gates of the lower spillway have also been installed including their stop logs. Furthermore, embedment for electro mechanical equipment e.g. piping, draft tube cones, runner chambers etc. have been fully installed for at least all the units. The ongoing works include casting of concrete for the spiral case particularly for units 3 and 4. The pending activities include installation of the intake trash racks, intake gates and stop logs for all the four units. This will be critical for second stage diversion to allow for progress of Electro-mechanical (EM) / Hydro-mechanical (HM) installations in the power house and also construction of the embankment dam of the right hand side of Koova Island

Manufacturing Progress

The powerhouse of the 183MW Isimba HPP as at end of April 2017. 85% of the Concrete works were complete.

With Procurement progress, we mainly review the status of offshore manufacturing for the electro mechanical and hydro mechanical equipment to be installed in the power plant. These include transformers, turbines, generators, governor systems, excitation systems, cooling systems, oil systems, Supervisory Control And Data Acquisition (SCADA), firefighting systems etc. The manufacturing of most of these systems and equipment has been finalized in China, awaiting a few factory acceptance tests before shipping to Uganda. The manufacturing of the main transformers and diesel generators is at least 75% complete. The manufacturing of the turbines and generators for all the units is complete.

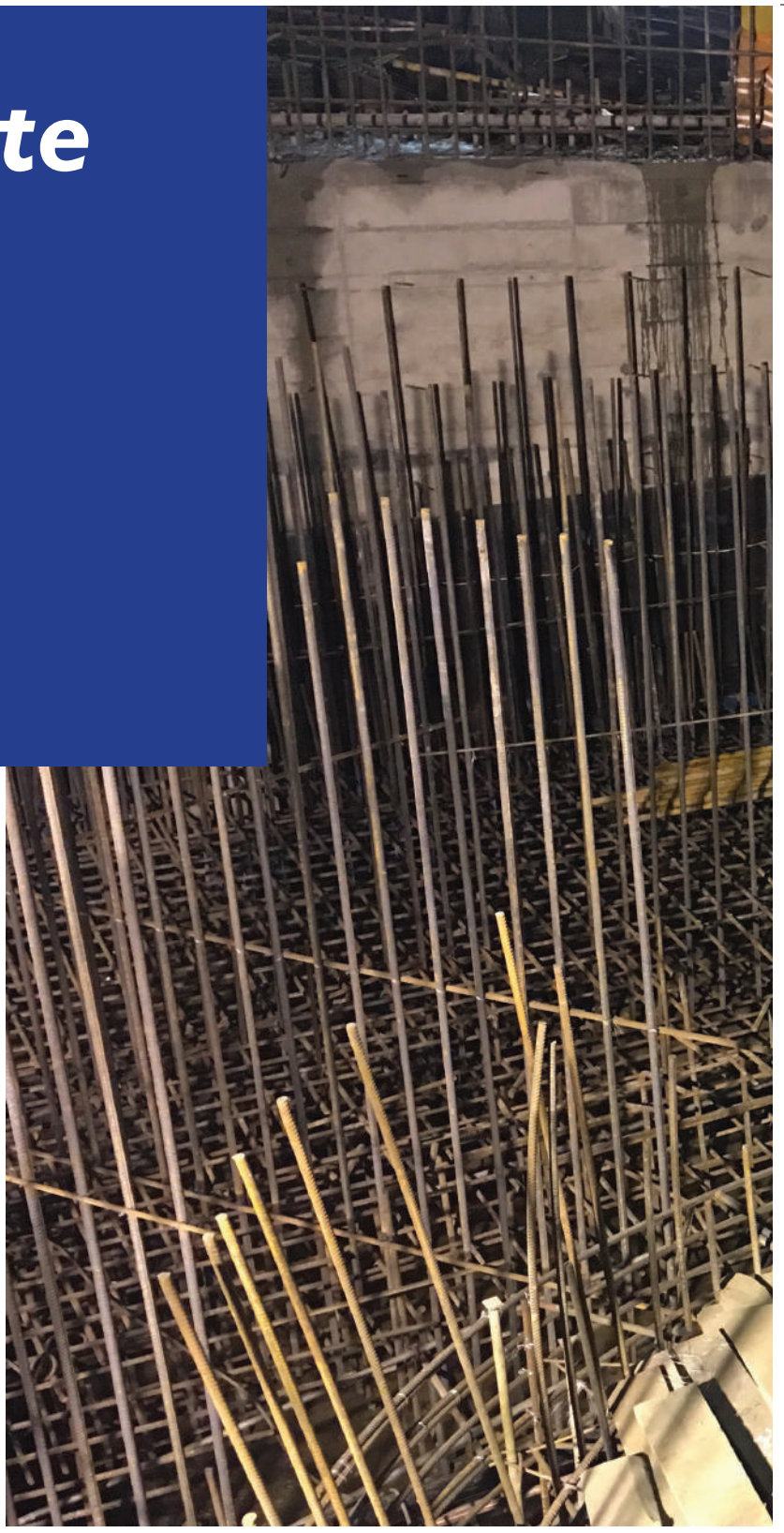
The key focus for the employer/UEGCL in the next couple of months is to witness and take part in the factory acceptance tests and inspections of these systems before they are shipped to the site for installation and commissioning.

Health, Safety and Environment

Health, Safety and Environmental (HSE) management is an integral part of Isimba Hydro-power Project operations to ensure environmental sustainability of the project. In order to achieve this, the project implementation team is working in partnership with the key lead agencies such as National Environment Management Authority (NEMA), Kayunga and Kamuli District Local Government authorities in the project HSE monitoring activities. Six certificates of approval for the Environmental Impact Assessment (EIA) for Isimba Hydro-power Project and its auxiliary structures were obtained from NEMA and twenty various permits and licenses were obtained from other lead agencies. In an effort to comply with the regulatory requirements in the above mentioned certificates and permits as well as national and international standards, ten Health, Safety Environment (HSE) and social, management plans were developed and are being implemented by the contractor, supervised by the owner's engineer.

The employer/UEGCL is monitoring the implementation process of the above mentioned plans and giving advice on the desired practices/actions to ensure continuous improvement on HSE performance. From the internal assessment conducted in June 2017, compliance with the regulatory requirements in NEMA certificates and permits/or licenses from other lead agencies is rated at about 70%. Regular ongoing monitoring activities such as noise and vibrations monitoring, water quality monitoring, site inspections and stakeholder engagement are being undertaken to ensure continuous improvement.

Status Update on Karuma HPP – June 2017



Karuma Hydro-power project (600 MW) is located in Kiryandogo district of Uganda. It is a run-of-the-river (ROR) scheme located on the Kyoga Nile stretch between Lake Kyoga and Murchision Falls, about 2.5Km upstream of Karuma Bridge. The scheme will utilize a gross head of 70.0m and design discharge of 1098 cumecs to generate on average 4,073 MU of energy per year.

The main components of the project include the dam, intake, headrace tunnels, underground powerhouse and transformer cavern, tailrace surge chamber and tailrace tunnels. The dam is a 14m high and 314m long concrete structure with overflow, non-overflow, river water training, ecological discharge, sand flushing bottom outlet and fish way sections. On the left side of the dam are six No. power intake structures leading to six No. 7.7m diameter headrace tunnels; one for each 100MW turbine unit. The underground powerhouse comprises mainly of a 45m long and 19.6m wide erection bay for equipment installation and maintenance, a units bay where six hydro generator units (capacity 100 MW each) will be installed, an auxiliary powerhouse, transformer cavern and cable shaft. The tailrace surge chamber is of an orifice type divided into two chambers, each connecting to three turbine units and one of two tailrace tunnels. Tailrace tunnels TRT #1 and TRT #2 are 8,705m and 8,609m in length respectively.

The Karuma HPP Project is contracted under the EPC (Engineering, Procurement and Construction) model with the Ministry of Energy and Mineral development as the

Steel form-works in the draft tube section of the Karuma hydro Power project

Works at the dam section of the Karuma Hydro Power project

Client/Owner and Uganda Electricity Generation Company Limited the Implementing Agency. UEGCL supervises both the EPC Contractor (Sinohydro Corporation Limited) and the Owner's Engineer (Energy Infratech Pvt Limed). The Owner's Engineer is in charge of offering consultancy and supervision services for the Construction of the Karuma Hydro Power Project, as contracted by the client.

Financial Progress

Karuma HPP is financed by both the Government of Uganda and Exim Bank of China. The Government of Uganda contributed 15% as counterpart funding of the Engineering, Procurement, and Construction (EPC) cost, while the China Export and Import Bank is financing the other 85% component. The total EPC Contract Price is USD 1,398,516,747 (United States Dollars One billion Three Hundred Ninety Eight Million, Five Hundred Sixteen thousand, Seven hundred forty seven only for the plant component of the Karuma Hydro Power Project. To date, a gross amount of USD 571,354,940 (United States Dollars Five Hundred Seventy One million, Three Hundred Fifty Four Thousand, Nine Hundred Forty) has been certified for payment to the Contractor bringing the project financial progress to 41%.

Physical Works Progress

The project commencement date was 16th December 2013. The project duration is 60 calendar months and the project completion date is December 2018. Therefore, project time progress is at 71%.

Civil works currently stand at 51.4% progress, an aggregation of site works

An aerial view of the dam section of the Karuma Hydro-power project

steel works in the power house section of the Karuma Dam project

and design progress. Progress of works at the Dam and associated works was slow during the 2017 second quarter, partly due to the defects (i.e. cracks at the Stilling Basin) identified in the concrete works the rectification of which necessitated detailed investigation and monitoring. Chinese Panel of Experts (PoE) visited site in April 2017 to carry out another investigation into the cause of the cracking and offered recommendations. Implementation of these recommendations which included; use of Polyvinyl Alcohol (PVA) fiber in the concrete, change in cement type and concrete have not been fully implemented. Meanwhile meanwhile monitoring of the cracks at the Stilling Basin is also ongoing.

Significant progress was registered at the Intake and pressure shafts. Apart from pressure shaft #3, concrete lining of all other pressure shafts (#1, #2, #4, #5, and #6) was completed. Installation of draft tubes and the associated concrete works were the key activities in the Powerhouse. Installation of all draft tubes was completed but there was no significant progress in the Surge Chamber as the Engineering, Procurement and Construction Contract (EPCC) is still designing required scaffolding temporary works required for concrete works.

Concrete works in the Main Transformer Cavern (MTC) and Bus Duct Tunnels (BDT) commenced and are progressing well.
Regarding HM/EM works progress is currently at 7.6% (design and site progress). The Engineering, Procurement and Construction Contract (EPCC) has made significant progress with the fabrication and installation of the Head Race Tunnel penstocks. Lower bend penstock installation in Pressure shafts #1, #3, #4, #5 and #6 were completed. Installation of Draft Tubes in the Powerhouse was also completed. However, tracking of progress for EM/HM equipment such as Gates, Hoists, Transformers and Generators is difficult as these are being manufactured offshore in China. Information available is only based on Engineering, Procurement and Construction Contract (EPCC) progress updates. The OE has been asked to develop a plan of having an independent verification of progress for HM/EM equipment other than waiting for Factory Acceptance Tests (FATs) which is only done after a long period of time with a potential of not being able to reverse any deviations made during manufacture.
Overall Physical Progress as at end of June 2017 is at 59%.

Health Safety and Environment

Whereas a general improvement of Engineering, Procurement and Construction Contract (EPCC's) project Health, Safety and Environment (HSE) aspects had been registered in the first quarter of 2017, quarter 2 has seen a rise in Health, Safety and Environment (HSE) incidents/accidents across the site owing to the laxity and non-responsiveness of the EPCC in implementing corrective actions as communicated by the Employer's Team. OE has been instructed to enforce Health, Safety and Environment (HSE) compliance using all measures available. Some of the outstanding issues requiring EPCC's attention include; inspection and certification of the lifting gear on site, provision of safe drinking water, training and certification of the crane operators, riggers and banks men and defensive driving training of the project drivers.

UEGCL and the SDGs

Nicholas RUGABA AGABA
Assistant Project Manager – Isimba HPP

Our tagline "Generating for Generations" undoubtedly shares the same ethos with sustainable development. Sustainable development is a concept that was first defined in 1987 by the 'Brundtland Commission', a special UN body, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". At Uganda Electricity Generation Company Limited (UEGCL) if we are indeed generating for generations, then we are surely fronting the sustainable development agenda, and will indeed play a big national and regional role in achieving the Sustainable Development Goals (SDGs). There are seventeen (17) SDGs as championed by the United Nations and other global agencies multinational banks, governments and civil society. The post 2015 development agenda for Africa and across the developed and emerging economies shall indeed be varied and wide. It is important that for Uganda to shape a narrative and agenda that will work for it's close to 10 million people who are living below the poverty line, and over 30 million people who have no access to electricity.

Sustainable Development Goal 8 on Decent work and Economic Growth is focused on promoting sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all across society and communities. UEGCL with its mandate of project implementation, operation and maintenance of Isimba (183MW) HPP and Karuma (600MW) HPP has increased its work force with recruitment of engineers, sociologists, accountants, business executives, lawyers etc. thus offering good employment opportunities for qualified youth across the professional divide. These decent jobs are key not only for capacity building for the national workforce but also for economic growth, because jobs and employment income do support aggregate demand in the economy. Our Graduate Engineers program also goes a long way to demonstrate our efforts towards building skills and knowledge of youth, thus supporting youth employment and capacity building.

The ninth Sustainable Development Goal on Industry, Innovation and Infrastructure is intended to facilitate the building of resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation. UEGCL as the implementing agency for the flagship energy infrastructure projects, Isimba HPP and Karuma HPP, has been at the fore front of design review and construction supervision of the project works to ensure we get resilient infrastructure assets for the long term generation of electricity for both domestic consumption and industrialization. With over $1.5 billion in debt financing on UEGCL's financial books, these infrastructure assets have indeed to be resilient for revenue generation and loan repayments.

The thirteenth and fifteenth Sustainable Development Goals are about Climate Change and Life on Land respectively. They are geared towards efforts to combat climate change and its impacts, to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. UEGCL's energy projects for both large and small hydro utilize water resources/ rivers and land, and are sometimes located in fragile ecosystems e.g. national parks, waterfalls etc. The utilization of strong tools like Environmental Management Systems based on comprehensive Environmental and Social Impact Assessments (ESIA) will go a long way in achieving these two goals.

Sustainable Development Goal 5 is on Gender Equality, and empowerment for women and girls. Aspects regarding equal access to employment opportunities and equal pay for similar roles are big on the gender equality question across the world. UEGCL's equal employment policies go a long way in supporting this sustainable development goal. Our Board is also a best practice example for women in leadership, and it goes a long way in creating opportunities for women and workplaces and inspiring young girls in education and learning.

The success of the SDGs will indeed depend on the support and engagement of different players across the political and economic horizon. Uganda Electricity Generation Company Limited has a fundamental role to play in this new global development framework and as always we are confident the organization will not shy away from the challenge.

Climbing the Corporate Ladder

Harriet OYULU EKUDE
Chief Human Resource Officer

As you embark on the journey to join the workforce, you will be given the freedom to create your own path. Too often, young people focus solely on advancing their career as quickly as possible. It is only natural for them to have a sense of ambition in order to race up the "corporate ladder", checking off each step just as they are taught to do in school.

They choose to push themselves to succeed within a given company's clearly defined structure. Searching for a purpose in some instances imports finding your passion. I could easily succeed within a given company's defined structure. Well and good. A second school of thought, however, suggests that in order to achieve career fulfilment, one would rather spend their early career first identifying a purpose. I could easily resonate with this approach because passion is informed by underlying social circumstances and newly acquired knowledge is dynamic and constantly evolving.

One's creative strengths, however, are innate. Notice your patterns, habits and tastes. Write them down. Don't view your interests as distractions from your career. See them as guidelines. In the process of finding your purpose, it requires self-reflection when you initially join the workforce.

It is important that you strive to become an expert in your field. You can only do this by investing in your career. This can be achieved by putting in some extra off hours to research, learn and understand your work. Share the insights that you gain through your research and learning to further cement your point of view on the work that you are doing within your field.

Today, leaders like to see their teams taking initiative especially when it is aimed at furthering a given team's advancement towards overall achievement of an organization's vision. They are especially inspired when they see one in their team who puts in an extra effort to improve their personal goals because it drives home the whole essence of effective work-home balance. Make an impression and be labelled as a self-starter capable of taking on more responsibilities.

Furthermore, you ought to be inclined towards challenging the current thinking. Being comfortable with the status quo is detrimental to your success. Always look for something you can do better for the purposes of improving your organization. Industry outsiders are the ones that typically breakthrough current paradigms. They have no investment in the way work is presently done. So, they seek alternative ways of thinking and doing things better. Do not come through like you know it all; help others learn what you may, through research and thinking. Share the spotlight because humility is always an attractive quality. Hence, as you begin to earn accolades, be sure to share the spotlight with your team. It will show a level of maturity that deserves a chance to lead.

Lastly, effective communication skills are a competence that can facilitate your process of climbing up the corporate ladder. Take time to listen so that your colleagues and other people understand that you value their input. Seek clarity and obtain facts before you draw any conclusions. Good communication involves maintaining a positive attitude even when the situation is bad. Emotional resilience is a sign of maturity and great leaders are measured by their levels of emotional resilience.

Managing Performance at UEGCL

By Beat NABACWA –Head Business Performance

Any effective performance management system will closely pay attention to two major aspects i.e. the employee and the business itself. Once any of these does not receive the attention it warrants, one can as well say the company or organization is "out of business". As UEGCL traverses the journey to become "The leading power producer in the Great Lakes Region", it only leaves room for continuous performance improvement. Perhaps this is one sure way of achieving that ambitious vision.

In line with the strategic path towards fulfilling UEGCL's mandate of "Providing reliable, quality and affordable power for social economic transformation", UEGCL is committed to having in place the right people and business systems to accomplish her mission. Performance management forms an integral part of an effective business management system. It is within that context that UEGCL birthed the Business Performance Section (BPS); which has been in existence for almost 2 years. This section is charged with the responsibility of design and effective implementation of internal performance contracts, spearheading the operational planning process as well as design of performance monitoring and evaluation systems and their continuous review in line with best practice.

In an effort to step up accountability, the UEGCL Board approved an internal performance contracting framework for 2016; which was a clear sign of commitment by the Top Leadership "to move out of our comfort zone" and develop a mindset of stretching and going the extra mile. In the spirit of continual improvement, the 2017 contracting framework was enhanced, taking into account the lessons learned from the previous year. These lessons were informed by an internal staff survey whose results were subject to management approval. As such, the revised performance contracting framework provides for three levels of contracts; Level 1 is between the Board and the Chief Executive Officer (CEO) and Level 2 is between the CEO and the Departmental heads. Further still, in an effort to promote individual contribution towards the achievement of team goals, each staff signs off an agreement with their respective supervisor.

The Performance Contracts are code named "SPARC Contracts", an acronym for Stakeholder Management, Project Development and implementation, Asset Management, Rationalization of staffing and Capacity Development, which define the strategic themes of UEGCL under the current business context. Key in all these contracts are performance targets; which are essentially agreed upon between both parties and are the basis for performance evaluation. The one-year contracts incorporate a monitoring and evaluation mechanism which provides for bi-annual and annual performance reviews to assess if the intended objectives are being attained. In addition, to sustain the desired performance drive, monitoring is done both monthly and quarterly.

One of the tenets of an effective performance management system is ensuring that the system supports not only "doing things right but ensures that we do the right things". Borrowing from that principle, UEGCL has instituted a performance management system which looks at both process

based incentive scheme; which is being implemented to reward good performance. To promote a spirit of competition and continual improvement, performance reviews are conducted in a workshop setting where performance evaluation results are presented, discussed and actions for improvement clearly stipulated. As a result, the best performing Departments are recognized with both monetary and emotional rewards. The incentive scheme is expected to evolve as the business grows to ensure that it is a real performance driver. That notwithstanding, the CEO has greatly supported the reward scheme by providing international benchmarking opportunities to staff from the best performing Departments as a gesture of acknowledging exceptional efforts towards achieving business goals. To put this into perspective, the best performing staff in the most recent performance review were all smiles after being rewarded with an opportunity to attend the "2017 Africa Hydro Expo in Marrakech, Morocco".

The journey of a thousand miles begins with one step and UEGCL has made some strides in building a performance culture. As we embark on this journey, efforts are being directed towards proactive staff engagement, emphasis on excellence as opposed to mediocrity in whatever we do, effective communication and an action oriented approach as we go about our day to day business and embracing evidence based best practice in performance management. These are good precedents to sustaining a performance at UEGCL.

My Experience at UEGCL

By Pearl KOBUYENJE

Completing university is close to nothing if one doesn't secure a job. When that job comes along, it can better be described as the breakthrough. Liberation, financial independence, weekly assignments, and writing exams are all history. The excitement was, however, short-lived as new challenges emerge. As I got to learn, the transition is not that easy. It was not only the work environment and work ethic that had to change but also getting used to living in a city in which I have never resided.

Time management was not a new concept to me. So I wasn't surprised when on my first day of duty ,I was handed the ***Uganda Electricity Generation Company Limited (UEGCL)*** Human Resource Manual, which articulately described the 'Do's and Don'ts' of the company, including observation of working hours. It however quickly dawned on me that gone are the days when I could arrange my timetable in such a way that early morning lectures were avoidable. I also realized those meeting deadlines was paramount to fulfilling the entire UEGCL objectives.

The company culture was also a key learning point for me. This included reviewing my wardrobe as well as understanding the company 'lingo.' I had previously never heard of words like 'Form 5' and 'IPA'. In any organization, a new team player will be told about ensuring titles like 'Mr' or 'Ms/Mrs' are used. I learned that that was not necessary. Nevertheless, I have admired the respect with which colleagues address, and relate to, each other.

An additional aspect of UEGCL that I had to take into consideration was managing relationships in the workplace. The social dynamics of a workplace and University setting are different. Adapting to the norms of work-related relationships and interface was a daunting task at the beginning, but it slowly became manageable.

Some of UEGCL's organizational and managerial practices that I appreciate are the Friday meetings and social events. These practices and activities not only build nourish and consolidate team spirit, but they also allow one to acquire useful knowledge on the operations of UEGCL.

Within the Department of Corporate Affairs, I can confidently say that I have taken with me numerous skills as well as the knowledge that will help me in future endeavors. One of these skills is to pay attention to detail, ensure risk minimization and careful planning. These three are important given the fact that

this department is responsible for sustaining the image and reputation of UEGCL. Keeping abreast with national and international news is important as the world has become a global village of sorts. In as much as I have to consume news for my own knowledge acquisition, the Corporate Affairs Department has to do that for the rest of the company.

The entire UEGCL doesn't go out in the field on a daily basis so the Corporate Affairs team gathering information on the various dams and dam development from field personnel is essential to keep the organization updated on new developments and progress.

This information is used for compilation of publications such as the UEGCL bi-annual magazine, as well as writing and editing short news stories on UEGCL events and achievements. This has honed my editorial and writing skills.

My appreciation of UEGCL's contribution to the sustainable economic development of Uganda has been enhanced by what I have seen from the work being done on the Karuma and Isimba Hydro-power Plants.

I have also learned to take initiatives – without necessarily having to wait for approval. This was something I was initially worried about but during the learning process, I realized that doing so may in some cases be necessary, as long as it has been previously discussed.

I would like to thank the Corporate Affairs team for mentoring me and assisting me in learning the day-to-day UEGCL operations throughout my internship.

I previously had little knowledge of what electricity generation entails. I am now more knowledgeable about issues and developments in the energy sector. Learning does not end at the tertiary level; it just grows and deepens, as we strive for new heights. I admire UEGCL's efforts in bringing Uganda closer to the realization of Uganda Vision 2040 and to materialize its (UEGCL's) vision and to be the biggest power producer in the Great Lakes Region. I would like to take this opportunity to thank all UEGCL staff for taking me on board and enabling me to transform from a student's environment to that in a workplace.

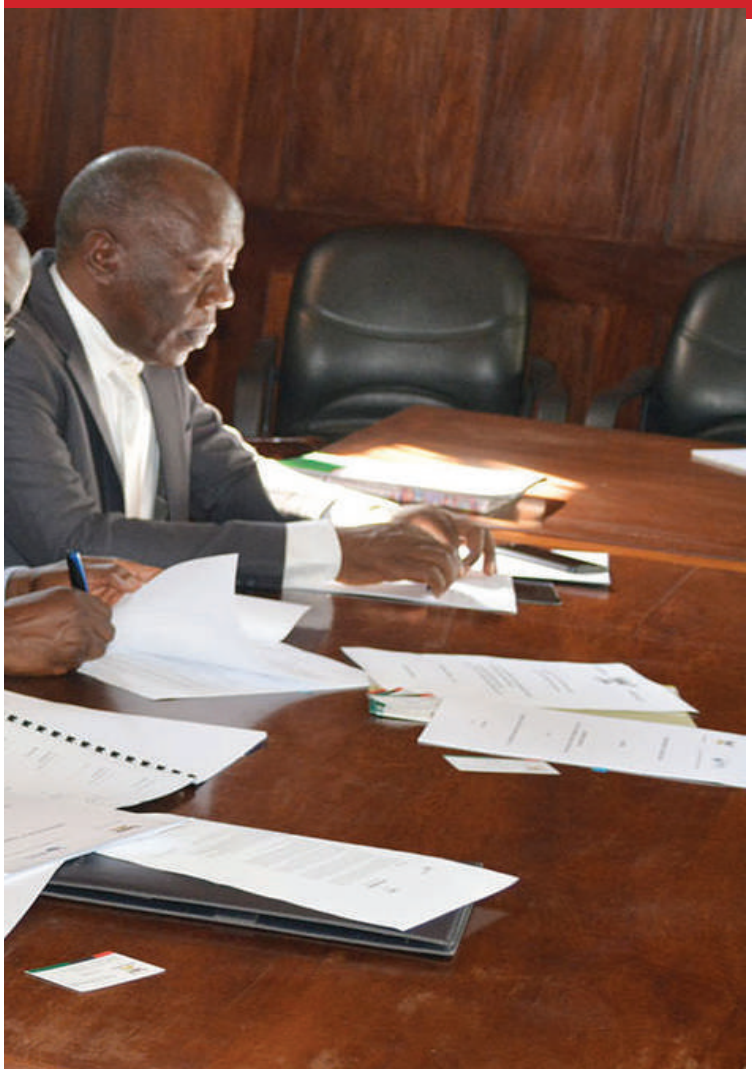
UEGCL Signs MOU with CEDAT (MAKERERE UNIVERSITY)

By Cissy NAWATENE-PRO

On the 4th March 2017, UEGCL signed an MoU with Makerere University College of Engineering, Design, Arts and Technology (CEDAT), and the momentous function was presided over by non-other than the Vice Chancellor of Makerere University, Professor John Ddumba Ssentamu, the Principal CEDAT, Dr. Henry Alinaitwe and Dr. Eng. Harrison MUTIKANGA, the Chief Executive Officer UEGCL.

The main objective of the MoU is for both parties to develop joint programs aimed at promoting knowledge and skills exchange from a practical and theoretical perspective. The partnership will also promote Research & Development in the Energy Field.

The partnership will be operationalized through the delivery of joint short, medium and long term projects in appropri-



ate skills development and training programs relevant to the identified needs of both parties. It also includes promotion of students' field attachment, support and promotion of studies in specialized fields in the energy sector, synergy in policy formulation and collaboration in corporate social responsibility activities among others. For students, there will be an opportunity to make use of the generation facilities that are already in existence and those under construction.

Specifically, the partnership will buttress one of UEGCL's major aspirations to capacity development in the energy sector, which is the establishment of the Hydro-power Training and Vocational Center (HTVC) aimed at addressing the emerging needs of both parties and the country at large. Again, this is in line with the Governments vision of establishing centers of Excellence in the various sectors. Activities in this regard will include exchange of trainers, trainees, design of curriculum, and related activities.

UEGCL is a wholly owned government company that is redefining its destiny within its mandate. As will be recalled, the mandate of the company is to "to establish, acquire, maintain, and operate electricity generation facilities and to promote Research and Development in the electricity generation sector while running the company on sound business principles".

In line with the National Vision 2040, as well as the National Development Plans, UEGCL's Strategic Direction 2015-2017 prioritized the Capacity Building, Research and Development as a means of improving efficiency in the Generation of Electricity. One of the envisaged means of achieving this is through partnerships with various institutions both academic and knowledge based.

Currently, Makerere University offers a programme on Renewable Energy. Indeed, such programmes will greatly benefit from UEGCL's practical arena. This partnership will therefore in turn contribute towards the attainment of the Government of Uganda's Goal of sustainable and affordable electricity to the people of Uganda.

Energy Saving Tips

By: Musa MUKULU

Ugandan consumers are still either consciously or unconsciously wasting energy resources. Energy efficiency in homes is essential in ensuring reduced electricity bills and also an automatic transfer of power to industries and other medium-sized companies engaged in production. Energy saving is key to both Government and consumers. It is always the responsibility of the consumers to save on their energy bills by adapting to the energy saving tips.

By introducing energy saving measures mostly to domestic users, Government could save a considerable amount of power that can be utilized for medium and large scale consumers, like industries. This would in turn set a good environment for more industries that will translate into creating more jobs.

The common forms of energy usage in homes and offices are;

Lighting
Heating
Cooling

In this edition, emphasis will be on lighting;

Energy saving tips

Technology change in the lighting industry – the manufacturers of the lighting bulbs have continued to invent energy saving bulbs. The shift was from the conventional bulbs (incandescent bulbs) that were consuming in the excess of 75-100Watts, to innovation of the Compact Fluorescent Lighting bulbs (CFL energy savers) with reduced consumption of between 8-15Watts and lately Light Emitting Diode bulbs (LED bulbs) that further reduced consumption to less than 5Watts per bulb. So in simple terms, the power consumed by one 100Watts incandescent bulb could be used to power twenty (20) LED bulbs.

Using an example in the table below of a house with 10 security lights, comparing the costs of running the three types of bulbs for say 12 hours;

HINT:
Lights that are not required should always be turned off.

Table 1: Comparison of the three different types of bulbs

Type of bulb	Rating (W)	No. of bulbs	Running hours	Daily consumption (Wh)	Monthly consumption (kWh)	Unit cost (UGX/kWh)*	Total bill (UGX)
Incandescent bulbs	75	10	12	9000	270	697	188,190
Compact Fluorescent bulbs (Energy savers)	15	10	12	1800	54	697	37,638
Light Emitting Diode (LED) bulbs	5	10	12	600	18	697	12,546

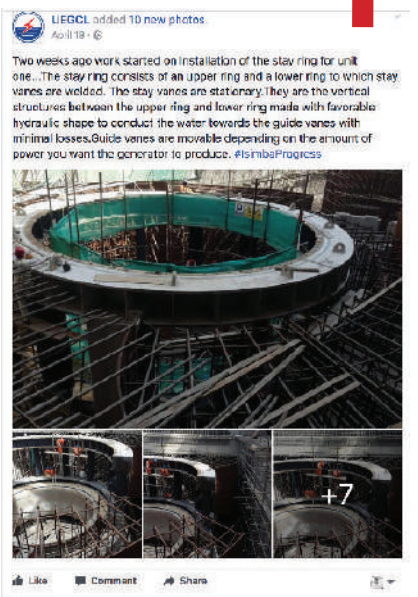
*assuming the 15kWh lifeline units that cost 150 UGX/kWh have been used elsewhere

From the table above, a significant saving is achieved by use of energy efficient bulbs for lighting. By using the CFL bulbs as opposed to incandescent bulbs, a monthly saving of UGX 150,000 is achieved. Again shifting from CFL bulbs to LED bulbs, a monthly saving of UGX 25,000 is achieved.

Therefore, Government through MEMD and ERA is commended for the initiative of introducing the free CFL bulbs some years ago and again more recently the introduction of the free LED bulbs.

UEGCL

In Media




business

Tension as senior managers lose jobs at Nile Breweries


Pensioners overwhelm validation team

Uganda to lose sh22b property in Kenya under new land law


Tullow wants $250 million settlement maintained

Cnooc makes formal bid for Tullow shares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France gives Uganda sh6b for green energy

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URA SEEKS TO GET SH120B FROM UIL

BETWEEN THE LINES:

UDB gets sh100b capitalisation from Saudi Arabia


L CASH PROBE

e ministry officials admit


First Lady presides over Bwindi Nursing School's first graduation

Former URA manager grilled over failure to claim Heritage Oil costs


SPECIAL SECTION

POWER GENERATION

New Vision ADVERTISER SUPPLEMENT

We are committed to increasing power – UEGCL

UEGCL Generating For Generations

IN STRIDE WITH NRM MANIFESTO IMPLEMENTATION


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THE NEWS GRID

Your essential cross-reference guide to the top stories from around the world

nV

Uganda | Africa | The West | The East

News

Odama pleads for grassroots women

The chairman of the Acholi Religious Peace Initiative (ARLPI), Archbishop John Baptist Odama, has asked the Government to empower women at the grassroots so that they can move at the same pace as their elite counterparts. Odama made the remarks in a speech read by the vice-chairman of ALRPI, Sheik Musa Khali, during Women's celebrations in Gulu.

Female inmates lament

Inmates in Gulu Prison women's wing want legal service providers to help them access legal representation in court. Christine Obol, an inmate, said many inmates cannot hire lawyers and end up being convicted unfairly.

Free education due

The President of Ghana, Nana Akufo-Addo, has assured Ghanaians that his government will fund the cost of public senior high schools for all those who qualify for entry, beginning from the 2017/2018 academic year in September.

White House: One held

One person is in custody after a suspicious vehicle drove up to a White House checkpoint on Saturday night, the Secret Service said after CNN reported that the driver claimed to have a bomb.

Complaint filed

A South Korean animal rights group has filed a complaint with Police against former president Park Geun-hye for abandoning nine pet dogs in the presidential Blue House after being dismissed from office. The dogs are Jindos, a Korean hunting breed.

Politics

Sickle cell burden worries MPs

Lawmakers have taken exception to what they have described as the Government leaving management of the sickle cell disease burden to NGOs. Reacting to a statement by health minister Dr Ruth Aceng on Thursday, MPs Alex Ruhunda, Godfrey Katusabe, Raphael Magyezi and Abdu Katuntu faulted the Government over its handling of the disease.

Candidate promises

Makerere University's Democratic Party guild candidate, William Karamagi, has promised to push for a tuition-loan scheme which allows students sit for exams even if they have not fully cleared tuition.

Al-Sisi to visit the US

Egyptian President Abdel Fattah al-Sisi will make his first state visit to Washington during the first week of April at the invitation of US President Donald Trump, Egyptian newspaper *Al-Ahram* has reported.

Paris airport shooting

A man shot dead by French soldiers at Paris Orly Airport on Saturday shouted he was there to "die for Allah" and tried to seize a soldier's assault rifle, intending to open fire on passengers, a prosecutor said.

Thousands flee Mosul

Thousands of Iraqis surged out of western Mosul on Saturday during a lull in heavy fighting in districts around the densely populated Old City where Iraqi forces are facing fierce resistance from IS militants.

On Camera

Uganda

Board members of Uganda Electricity Generation Company touring a section of the power house in the tunnel at Karuma dam which is under construction at Karuma falls on Thursday. Photo by Moses Nambafu

Mexico

A soldier flies in a helicopter as he patrols at a poppy plantation used to make heroin during a military operation in Badiraguato on Saturday. Reuters photo

Business

Tullow to work with Total, CNOOC

Tullow will now work with Total and CNOOC to conclude definitive sale documentation in relation to farm-down. Tullow will cease to be an operator in Uganda, but will retain a presence in-country to manage its non-operated position.

Shilling unchanged

The Ugandan shilling traded unchanged on Friday, with weak sales among merchandise retailers slowing down importer appetite for hard currency. Banks quoted the shilling at 3,590/3,600.

Govt to pay social grants

South Africa's court ordered the government on Friday to pay social grants on April 1 via its current service provider, seeking to end a fiasco that had threatened the payment of benefits to 17 million people.

Bonuses could rise

Wall Street bonuses may climb as much as 15% this year in their first meaningful uptick since 2009, compensation firm Johnson Associates Inc said on Friday.

Sinopec to buy Chevron

China's Sinopec is nearing a deal to buy Chevron's South African oil assets for up to $1b to secure its first major refinery on the continent, several people familiar with the matter said.

Sport

BUL struggles against relegation

Jinja-based BUL Football Club have to improve their performance in order to survive relegation in the Azam Uganda Premier League. The team is currently in 12th position and is left with eight games to wind up the season. BUL's captain Hakim Magombe said their target is to win at least five games.

Corporate League here

There will be more activity in the Uganda Corporate League after six new teams registered for the annual programme this season. The league will have 46 teams, up from 40 that participated last year.

Ahmad to audit CAF

The new Confederation of African Football (CAF) president, Ahmad Ahmad, has said his first act will be to audit the body, based in Cairo, Egypt. The official from Madagascar won elections by 34 votes.

France sink Wales

The France rugby team beat Wales 20-18, thanks to a converted try by Damien Chouly 20 minutes after full-time had elapsed following an extraordinary finale to their Six Nations match on Saturday.

Cummins proves worth

Pat Cummins exceeded expectations in his first test match in more than five years and the speedster will pose a sweet selection headache for Australia's cricket team, bowling coach David Saker said.

Showbiz

A-Pass cautions on security

In the wake of AIGP Felix Kaweesi's murder, local artiste A-Pass has cautioned on security. "On February 4, I talked about lack of security in and around residential areas and it did not look important when I said it. We have to be careful with our lives. We can all lose our lives easily and I do not think Kaweesi is the first victim," he posted.

Bobi eulogises Kaweesi

Singer Bobi Wine has condoled fallen AIGP Felix Kaweesi. "Rest in peace O.B. You respected people even when you differed in ideology. My deepest condolences to the family and country at large," he posted.

Prince banned from sex

Ghanaian actor Prince Yawson has said doctors have advised him to stay away from sex because of ill health. The veteran actor was recently rushed to Trust Hospital in Accra in what was suspected to be a mild stroke.

Bieber stays silent

Justin Bieber has refused to speak to the cops about his alleged head butting of a guy at a pre-Grammy party. The case is set to be referred to the District Attorney.

Lam loves babies

Monna Lam and her filming partner, Ronan Pak, recently attended a friend's baby shower. Monna showed her motherly love when playing with the baby and revealed that she loves children.

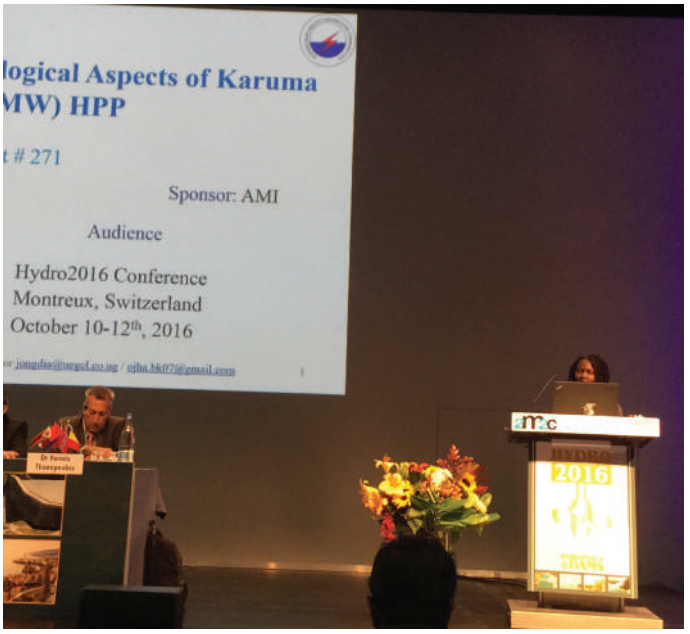
Hydro 2016 Conference Swit technical talkshop on novel i

By -Simon KASYATE-
Manager, Corporate Affairs

When one hears of a conference or exhibition, perhaps what immediately comes to mind is a talk shop plenary in a huge hall like our Victoria Ballroom at the Serena with tents just outside and nothing more than just African print wear on sale, a few free brochures and the usual media going about their spaghetti connection of cabling as they jostle for vantage positioning for their broadcasts. That's not to mention the menacing security, made worse by the presence of such dignitaries as the President.

For three days in October 2016, I was privileged to be part of the UEGCL team attending the Annual Hydro Power Conference, aptly named Hydro 2016 in Montreux Switzerland. For a non-technical person at this highly technical event (at least from the shared programme), your guess is right, I looked out more for the form and less for the substance. I looked out more for the aesthetics and how well the opening band played the anthems to the stage arrangements than fact check statistics on pump storage dams, who has the latest laser-remote controlled turbines, nuts and bolts. And yes, there was plenty for me…..read on.

But first, a bit about this annual conference. Arguably it was one of the most attended international gatherings for hydro-power professionals with expertise in the various inter-related disciplines in the field of hydro-power development. According to the conference brochure, "Emphasis is on encouraging the advancement of carefully planned hydro schemes in the less developed countries, and equally, maximizing the benefits of existing hydro installations, by maintenance and timely upgrading." Exactly why such a conference would be most relevant for Uganda and specifically UEGCL, the government agency tasked with electricity generation. With thousands of participants from all corners of the world, you can imagine what a logistical nightmare it paused for the organizers. I am still in awe at how they pulled it off almost seamlessly, without incident. We are talking about over 32 sessions, a pre-conference tour, a social programme with some kind of recreation or other every single



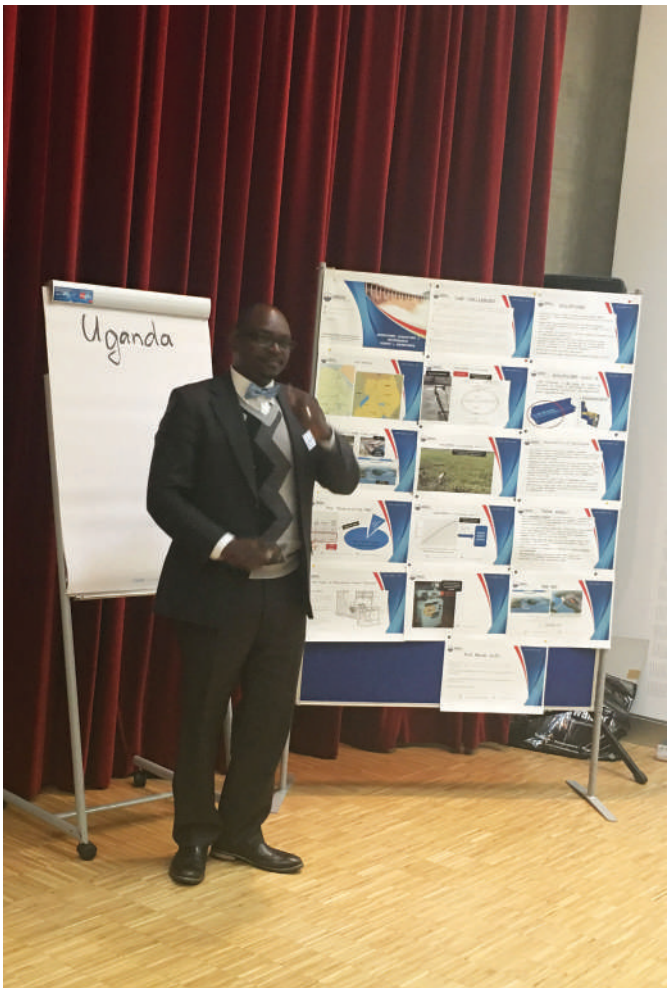
Geotechnical Engineer, Joan Ongodia, makes the UEGCL presentation on the geology of Karuma Hydro Power project at the Hydro 2016 conference in Switzerland. The presentation was co-authored by the CEO, Dr. Eng. Harrison E. MUTIKANGA

zerland: more than a deas

The exhibition floor at Hydro2016 conference

night and a post-conference study tour programme spanning a couple of days. I am talking about getting the right audio-visual equipment for every session, several hundred square meters of exhibition space that needed partitioning, and other amenities, lunch and refreshments for all participants etc.

While you ponder on the sheer magnitude of the Conference, hear this. The venue was the 2M2C Convention Centre in downtown Montreux overlooking Lake Geneva, which is also home to the world famous Montreux Jazz Festival that takes place every summer. The centre, with a total area of 18000 m2 and equipped with state-of-the-art technology, has a flexible lay out and a total of 23 modular meeting rooms, all offering panoramic views of the lake and the Alps. The Montreux – Vevey area is set against a background of stunning scenery, including vineyards, mountains, and medieval buildings. That is the reason why it is regarded part of the famous Riviera. Now that feels like



Making a presentation on the Operation and Maintenance of the Nalubaale-Kiira dam complex to delegates of a World Bank sponsored O&M conference preceding the Hydro 2016 conference in Matigny Switzerland.

a cool place, something like a convention centre around Lake Bunyonyi Area in the South Western Kabale district of Uganda. Save for the boats and exquisite cars on the immaculately paved boulevards, the architectural marvels that the buildings are, trams and trains, public parks and folks walking dogs and other pets, lovers holding hands as they stroll along the lake shore, occasionally stopping for a random kiss to savour the moment; , Montreux reminds one so much of Lake Bunyonyi. Back into the conference rooms, the deliberations during the three-day conference provided a bridge between policy-makers and practitioners, highlighting topical issues and encouraging balanced debate. Everybody, from Engineer to publicist, had something fascinatingly going for them.

I left awed at the hydro-power potential of the small country that Switzerland is. With 33 hydro and pumped-storage schemes under construction (at both new and major upgrade projects), which will provide more than 2100 MW of new capacity, Switzerland is one of Europe's most active countries for hydro development at present. It is also one of the European continent's original major hydro-power developers, having based much of its industrial development on exploitation of its hydro resources during the 1950s. Today hydro-power produces about 60 per cent of Swiss electricity. The Swiss Government (through the Federal Office of Energy) is promoting

Dr. Nixon Kamukama listens attentively to a presentation by one of the exhibitors at the Hydro2016

the future use of hydro-power through a variety of measures, as part of its 'Renewable Energy Action Plan'. As well as new developments, existing plants are being renovated and expanded, taking related ecological requirements into account. The target is to increase production by at least 2000 GWh/year through these measures. Now this is quite something!

The teas, well, tea and coffee is tea and coffee, no matter where on earth you are. The ambiance and vessels in which it is served make all the difference. It was good coffee and tea in Switzerland. The food; there was a culinary delicacy for every pallet but certainly no traditional Ugandan food –expectedly so.

Aaah, so what else? Well, it's just good to be out there, listen to intelligent and interesting old and novel ideas and ideals, meet good people both at professional and personal levels and take in the moment away from the usual day-to-day routine. You return richer in every sense of the word, even relaxed with an extra spring in your bounce. For me, I am still to get over the flawless organization of such a huge conference with both indoor and outdoor activities yet without much of amiss of a schedule gone wrong, a bag lost, a meal missed or a ticket cancelled. It's one thing to have a captivating conference, it's even a bigger logistical and organizational challenge to pull it off seamlessly. Lots of lessons to learn!

UEGCL Pictorial

SCENIC: It's always a good spot to take the last picture after a successful site tour. The Karuma HPP Outlet.

R-L: An official from CWE, the Isimba HPP contractor, talks to Members of Parliament on the Natural Resources Committee.

PROJECT UPDATE: CEO Dr.Eng MUTIKANGA in one of the many media enganements on the progress of the projects

BENCHMARKING: Chief Operations Officer George Tusingwire, James Otto, Chief Executive Officer Dr. Eng. Harrison Mutikanga and Board member Eng. Gilbert Kimazi during a recent visit to the Chelan Public Utility in Washington

An exhibition hall at the Chelan Public Utility in Washington. The hall contains artifacts and project pictures from years gone by. Visitors are appraised on the history if the project.

Workers at Karuma HPP fix the formwork in the draft tube pit in the power house section of the facility.

Locals of Duciny Village in Kamdini sub-county listen attentively at the news of Karuma HPP's CSR health facility to be built in their neighborhood. The community donated land for this project to UEGCL.

Members of Parliament on the Natural Resources Comittee visit Isimba

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