

# VRA NEWS

Newsletter Volume 8 October — November — December — 2016



## CHIEF EXECUTIVE'S END OF YEAR MESSAGE

ING. KIRK KOFI

Dear Colleagues,

The year 2016 is steadily drawing to a close and so it is a good time to reflect on our achievements, challenges, and what we need to do to accomplish our corporate objectives in the coming year.

As an organisation, not only have we encountered a number of challenges in the year 2016 but also we have recorded some remarkable successes. Indeed,

we have cause to thank the Lord for His goodness and divine blessings, and for seeing us through another successful year, in the face of daunting national austerity and global slump.

Looking back, we can conveniently part ourselves on the back for holding the power system together, after a debilitating load management programme which saw some companies, including some of our major customers and stakeholders, downsizing or shutting down their businesses completely.

Today, through hard work and collaboration from IPP's, we have excess generation which is good for

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the country. Nevertheless, the effect of the power crises on the entire country has dented our hard earned corporate image and reputation, which, I am certain, will take us quite some time and effort to recover fully.

Our challenges were mainly with the low water level in the Akosombo reservoir, inadequate supply of gas, the use of crude oil, and weak revenue collection, all contributing to the high operating cost, and thus worsening our already precarious financial position. Revenue collection was also impeded by rigid legal frameworks which adversely affected our cash flow so badly, that we had to apply stern measures to ensure we operated within budgetary provisions.

Notwithstanding these challenges, we successfully made some modest gains by completing and commissioning the 220MW simple-cycle Kpone Thermal Power Station (KTPS). The retrofitting of the Kpong Generating Station also continued steadily with the completion of Unit 2 to full service on August 12, 2016, and expected completion of the project in 2019.

The greatest news this year was that the Akosombo reservoir appreciated to an elevation of 253.01ft compared to 244.80ft last year. This brought some relief on the power system since hydro can then be relied on to compliment thermal generation. The Government of Ghana (GoG) through the Ministry of Finance has also instituted a programme to help us restructure our debt.

### **Gas Supply**

Gas supply to the Aboadze enclave from Ghana Gas Company Ltd. gave us temporary relief during the better part of the year, but the intermittent shutdowns interrupted the smooth operations at the station. Also, the Authority followed with keen interest the proposed emergency LNG Project in Tema by West African Gas Limited, and the Tema LNG Project by Quantum Power Ghana Gas. When completed, it will enable our idle plants (the Mines Reserve Plant (MRP), the Siemens Plant, KTPP and other IPPs) to be able to come on stream.

### **Renewable Energy**

Renewable energy received a major boost with the

signing of the 22.82 million Euros loan facility for construction of the 8MW and 4MW solar plants at Kaleo and Lawra, respectively, in the Upper West region. We are also in discussions with AfD and KFW for additional funding to increase our solar capacity to above 50MW in the short term to increase our footprint in renewables. Additionally, efforts to build a 100-150MW wind power stations in four locations in the coastal belt progressed steadily.

### **Growth and Expansion Programmes**

We have secured Parliamentary approval and waiting for the sovereign guarantee from the Ministry of Finance to commence work on the 184MWT4 plant at Aboadze, in 2017.

Furthermore, discussions are also on-going for the repowering of the T3 plant at Aboadze. Whiles the conversion of the 220MW KTPP into combined cycle mode, and the commissioning of the 36MW Siemens (TT2PP) expansion project to make them more efficient remains our priority.

### **General Outlook and The way forward**

The evolving power market and the growing oil and gas sector offer us rare opportunity for growth and expansion. Analysts perceive the proposed ECG concessionaire-arrangement will make ECG more efficient and, hopefully, enhance our revenue mobilization efforts. But, unless we take drastic measures to improve our service delivery, the entrance of IPPs into the power market is very likely to gradually erode VRA's dominance in the sector, and ultimately, leave VRA with a marginal market share of below 50% over the next five years.

### **Organizational Renewal and Growth**

For these and other reasons, it is important for all of us to be committed to the organizational renewal efforts, aimed at repositioning VRA as relevant, efficient, and competent power utility. The Authority's Vision and Mission statements have therefore been reviewed, to reflect this desire of making VRA an international brand and benchmark power utility with the capacity to provide excellent power related services comparable to any company in the world. This is not only prudent but vital if VRA is to remain relevant, to attract and retain a reasonable market share in the sub-region.

To enable VRA focus on its core mandate and compete favourably in the deregulated energy market, Management is committed to transforming our non-power assets, including the VRA Academy, into standalone strategic business entities with the capacity to compete favorably in their areas of operation and be the preferred service provider. This is not only prudent but vital if VRA wants to offer competitively priced services, reliable power, and to retain/expand its market share.

It is my expectation that in the coming year, Management and Staff will collaborate closer on all fronts, especially, at this time that we have initiated a programme to form the VRA International company as a standalone subsidiary, to leverage our expertise and professional competencies for consultancy services in the sub region. Indeed, we will require dedicated, focused and a well-motivated workforce to deliver quality service to the expectations of our clients. In view of this, Management will continue to pursue best quality human resource management programmes, including staff rotations at all levels, skills and competency deployment, as well as promotion of staff wellbeing.

Once again, I entreat all staff to be cost-reduction-

focused and revenue- improvement-driven, especially, in overtime claims and material usage, to improve our financial performance. It is my belief that with discipline, dedication, commitment and hard work, we shall remain at the forefront of power development and power delivery in Ghana and the sub-region.

### **Conclusion**

Finally, on behalf of the Board and Management of the VRA, I extend my profound appreciation to each one of you for your invaluable contributions to the Authority's success and continued existence. Our organisation is privileged to have you as an employee and I want to take this opportunity to thank you all for your hard work and dedication.

It is my prayer that the good Lord will bless you and your families with peace this Christmas season and crown your efforts with success, good health and prosperity in the coming year. Thank you and God bless us all.

*Have a Merry Christmas And A Prosperous New Year*





END OF YEAR  
*Christmas*  
Messages from Departmental Heads



## CHRISTMAS MESSAGE FROM VRA ACADEMY

**C**hristmas time is here again! Christmas time is a time to reflect and celebrate our Saviour's birth, a special time to join together with family and friends to rejoice. It is a time of birth, wonder, sharing and prayer. A time to review our performance, values, attitude and challenges and plan for a better tomorrow.

We wish to thank the Almighty God for seeing us through the year 2016 successfully. Even though it has been a challenging year for the VRA Academy, we are happy to say that a good number of the challenges were surmounted, leaving us with a bright future ahead of us. The commitment of our staff, their zeal, willingness to go the extra mile and their untiring efforts to find solutions to the myriads of issues we were confronted with, was simply heart-warming. To staff, Part-Time Trainers and external facilitators of the VRA Academy we say ayeekoo, well done, congrats! Your attitude to work has been exemplary. Let's keep it up.

In line with our new mandate to provide a platform for structured and

quarterly Newsletters and at [info.academy@vra.com](mailto:info.academy@vra.com).

We take this opportunity to once again thank all VRA Academy staff, Part-Time Trainers, course participants and other stakeholders for their dedication and commitment towards the successful implementation of our 2016 training programmes. We could not have gotten this far without all of you. We appreciate your support and endorsement of our efforts and pledge to work even harder, as we seek 'to bridge the competency gap in the energy sector' in Ghana, West Africa and beyond. God richly bless you.

We will start Year 2017 with a big bang by hosting an international course for 20 participants coming from 7 West African countries. The course is being organised by WAPP and GIZ from Cotonou, Benin. 3 VRA Academy staff will also participate in the said programme. We have no doubt that the VRA Academy is poised to chalk great success stories in the coming years.

We pray the New Year brings us renewed hope, life, energy and greater success.

*I wish you all a Merry Christmas  
& Happy New Year.*



### EFUA GARBRAH-SARFO (MRS)

Chief Learning Officer, VRA Academy

systematic learning and development schemes for staff of VRA and other power utility companies in West Africa and beyond, the VRA Academy provided training for about 2000 course participants in 2016. This includes participants from VRA, GRIDCO and Bui Power Authority (BPA).

The VRA Academy also hosted participants from Mainstream Energy Solutions Limited of Nigeria (operators of Kanji and Jebba Dams). This was the first time the VRA Academy received Nigerian participants for its programmes in Akuse. Running courses for non-VRA participants is helping generate some revenue for the Authority.

We also engaged various stakeholders, both local and international, in discussions concerning partnerships, sponsorships, affiliations and accreditations for our training programmes. These included Kwame Nkrumah University of Science and Technology (KNUST), University of Ghana Business School (UGBS) and Ghana Institute of Management and Public Administration (GIMPA). Others included Association of Power Utilities of Africa (APUA), Energie Du Mali (EDM), PROEF Group of Companies, African Network of Centers of Excellence in Electricity (ANCEE) and GIZ/WAPP and Agent de Development de France (AfD).

We expect that the various training initiatives and partnerships would pave the way for a comprehensive training in both technical and non-technical fields for our clients in the energy, mining sectors and the general public. We look forward to having you all participate in our exciting programmes in 2017 and beyond. Look out for details in the VRA Academy's



## CHRISTMAS MESSAGE FROM LEGAL SERVICES

*Afioooo Afi; Afi aya ne eba ni na wo daa.*



**ELLEN BANNERMAN-QUIST (MRS.)**  
Director, Legal Services

We are so grateful to the Lord God Almighty for granting us the grace to see the end of the year 2016. Once again we are to take stock of our successes as well as the challenges we encountered in the course of performing our duties in this turbulent time in the history of VRA.

The Legal Services Department is very grateful to the Executive for their leadership and guidance. I thank all our client Departments and their staff for their support during the year as we worked towards the achievement of the Authority's mission and vision.

I would personally like to commend all staff of the Legal Services Department for your co-operation, support and sacrifice during the year and especially during this short period that I have assumed office as Director. Considering the numerous constraints, we have had to work within – short notice requests to review and draft agreements; to attend meetings; to give opinions/advice and also being inundated with numerous court cases - I say Ayekooooo to all of you! Despite all the challenges, we have nevertheless worked as a team to help achieve our goal as a Department.

As we crossover into 2017, I urge us all to continue to live the Authority's Corporate Values of

**Accountability, Commitment, Trust, Integrity** and **Teamwork**, in the performance of our duties in 2017 and beyond. It is important that we put in place appropriate strategies to surmount challenges and work together to achieve the Authority's objectives during the coming years.

I wish everybody and all your family members a very Merry Christmas and a New Year filled with Prosperity, Good Health and a determination to work even harder for the continued success of the Authority in the coming year.





# CHRISTMAS MESSAGE FROM THERMAL GENERATION EASTERN OPERATIONAL AREA

RICHARD OPPONG-MENSAH

I want to take this opportunity to extend my heartfelt greetings for the season and appreciate you all for your effort, energy, resilience, commitment, accomplishments and achievements for the year 2016.

The year 2016 was a difficult year for the Authority consequently we could not meet all our performance targets for the year as the financial position of the Authority could not support our operational budget expenditure. Nevertheless, the year 2016 saw us take the lead in the execution of 47G1 Unit Major Inspection when the Service Provider for the long term service agreement (LTSA) was reluctant in supporting the maintenance activity because of VRA's indebtedness to the Company. I therefore want use this opportunity to thank you all for your support and dedication, and for the extra hours that you worked to complete the Station 2 Major Inspection and the Station 3 expansion project. These achievements have been attained as a result of hard work and commitment.

Even as we are showcasing KTPS as a flagship thermal power plant, the attitude, drive and determination you demonstrated to accomplish the 47G1 unit major inspection will be the basis and measure for the formation of the Outage Team for the Eastern Operational Area of the Thermal Generation SBU.

All the Thermal Generation - Eastern Operational Area Units would be on standby mode for the whole of 2017 due to excess generation in the system, we therefore have to come out with initiatives to enable us use our assets to generate revenue. We shall also see the department transiting into a Subsidiary Business Company that will necessitate us to operate in a commercial environment, just like any independent power producer. This would require that we develop and implement effective commercial-oriented strategies to ensure a reliable supply of electric power and other related services to our customers.

Even though the year 2017 will be a challenging one, with greater clarity, a greater determination to succeed and a renewed commitment to provide exceptional performance, we ask just one thing from each of you – be better.

- Be better in your work – think creatively, efficiently and get the details right.
- Be better with our stakeholders – in how you respond to duty, in how you keep adequate measures to mitigate potential adverse effects on the environment, health and safety of staff and in compliance with acceptable environmental standards and how you ensure productive use of assets.
- Be better with your teammates – in how you support each other, how you communicate and how you care about them as people.
- Be better in your community – in how you give of your time and effort to make your neighbourhood a great place to live.
- Be better with our financial performance – in how you respond to duty, in how you minimize unit downtime, minimize business risks and ensure effective service delivery at minimum cost and how you appreciate cost.
- Be better in your relationships out of the office – in how you communicate, encourage and support.
- Be better to yourself – in how you take care of yourselves, personal protection, health and safety, in your personal expectations and in be.

You control how you approach your days in and out of the office. Commit to being better every day. Learn more. Be more responsive. Be more connected. Be more aware. Be tougher. Be more resilient. Be more creative. Be more present. Just be better.

Thank you for your loyalty and effort; we look forward to a great, productive and successful new year.

God bless all of you.



**JONATHAN AMOAKO –BAAH**  
Director, Technical Services

## CHRISTMAS MESSAGE FROM TECHNICAL SERVICES DEPARTMENT

**A**s we approach the end of another year and the Festive Season, I want to very briefly look back to the start of the year and see how the Department has performed so far on our key effectiveness areas.

The department generally reached all the goals we set for this year and this is all thanks to the work of each and every one of the employees in every area of the department, everyone played a part in this great achievement and we hope the good work continues in the coming year.

As part of the corporate objective of ensuring efficient project implementation management practices in the Authority, the Project Management Office (PMO) of the department successfully conducted Project Lifecycle sensitization workshops at Akosombo and Tema on the revised project lifecycle (PLC) document.

We also provided technical support to the VRA Training Academy in the form of training facilitation in Transformer Maintenance & Testing course, Generator Protection course, Risk Assessment and Job Safety Analysis course among others.

The Safety Management section also played a key role in ensuring the year ended with no fatality and low incident rate. This was achieved through effective safety monitoring and responsiveness to field support in the areas of safety presentation and delivery to client departments. It was however sad for not being able to climax the year's safety activities with the Annual Safety week celebration held in the second or the third week of November every year. This was due to factors beyond our control.

The Knowledge Management section under the department has also been able to sustain and manage the corporate online training programme for the Authority for over 50 staff providing over 500 engineering and management courses aimed at enhancing practical training and to supporting management policy of reducing cost of training. This is in addition to managing the VRA KM Portal for in house knowledge sharing. Also, in March, 2016 the section organized a two-day workshop for ambassadors drawn from the seven (7) established Communities of Practice (CoPs) in VRA. About twenty four (24) participants attended from the various functional areas of operation who are members of the various CoPs. The section has been able to capture over sixty (60) experts into the Expertise Locator Database.

Another major achievement worth mentioning is obtaining management approval to move the Akosombo Billing Unit under PROPCo to the Department aimed at bringing synergy between the Power Distribution

network maintenance activities and the customer billing and service activities. This merger has drastically improved customer services and revenue collection in the Akosombo power distribution network with a customer base of about **5,347** made up of individuals, institutions and business entities within Akosombo Township and the surrounding communities. Before this arrangement, revenue recovery was very abysmal. For instance, as at June 2015, the total arrears owed to the Authority by power consumers stood at **GH¢6,397,098.29**. The total revenue recovered as at July 2015 stood at **GH¢1,442,704.67**. In September 2015, the department initiated revenue recovery exercise aimed at recovering the consumer arrears backlog and continued the exercise to the end of 2015.

The exercise was intensified in 2016 and in comparing with the same period of July 2015, the department has improved revenue collection tremendously by **35.31%** amounting to a total of **GH¢3,123,408.95** with surplus of **GH¢815,081.48**. As projected at the beginning of this year, the revenue reached the **GH¢6,000,000.00** by the end of 2016.

Apart from serving the internal client

## CHRISTMAS MESSAGE FROM TECHNICAL SERVICES DEPARTMENT

departments, Technical Services Department also rendered services to private / government agencies in the form of commissioning, equipment testing and consultancy service. For instance, the Technical Audit section conducted switchgear and protection relay testing at the Abosso Goldfields in collaboration with VRA Training Academy. The section further participated in the commissioning of Pediatorkope PV Solar Mini-grid Supply Systems for Ministry of Power, as well as training of staff on testing of transformers at Damang Mines.

Our Project Management Office played a major role in the joint planning committee for the 5th AGI local Content & Investment Submit held in October, 2016.

With all these, I will also admit that the achievements did not come without challenges both internal and external, the major one being financial challenges faced by the Authority as a whole. The lack of funds syndrome affected the department in procuring critical items such as tools and equipment to boost our existing test equipment capacity especially testing equipment for solar and wind systems. The distribution unit could not also accomplish most of the audit recommendations due to non-availability of funds to procure essential materials in solving the identified problems.

To mitigate this problem, the department intends to prioritize its 2017 budget in line with our strategic goals.

I will also use this occasion to inform you that 2017 is going to be very exciting and full of opportunities. I therefore urge you to go and prepare yourself to face the bright opportunities that await us in 2017 while being mindful of

uncertainties ahead as well.

All in all, I can say that 2016 has been a very successful year for us. Its success is due to the collective efforts and commitments of you as staff and as well as the confidence repose in us by our many stakeholders. I wish to record my appreciation to all of you. I also acknowledge the work of management and support staff who have worked very hard.

I also strongly believe that behind successful transformation and reform it is critical to inspire our staff to perform better.

For now, we will take some time to relax and reflect on the meaning of Christmas as a time of giving, of happiness, of loving one another, of renewed hope. May the spirit of Christmas dwell with you all as we celebrate the end of another successful year for Technical Services Department.

I wish you and your families a Merry Christmas and a very productive and healthy New Year.

## CHRISTMAS MESSAGE FROM REAL ESTATE & SECURITY DEPARTMENT

I wish all staff of the Authority a Merry Christmas and a Happy New Year.

I take this opportunity to express my appreciation to the staff of the Real Estate and Security Department for their various efforts they put in for us to carry out our mandated operations despite the financial challenges during the year.

In the face of these challenges, it is important that we enter the New Year with a resolve to work hard for the success and prosperity of the Authority.

We are optimistic that the Real Estate & Security Department will continue to improve upon its operations in a more effective and efficient manner come 2017. Merry Christmas and a Prosperous New Year.





**DR. (MRS.) REBECCA ACQUAAH-ARHIN**  
MEDICAL DIRECTOR, VRA  
HOSPITALS SBU

and also to ensure that they continue to eat balanced diet, drink more water and drink in moderation, if they cannot avoid it altogether.

Staff are also to note that annual medical examination is mandatory. The essence of the medical examination is to keep a healthy and productive staff for the Authority. Prevention is better than cure.

As the year comes to an end, we entreat all staff to continue to support Management in all diverse ways, cut cost, improve revenue, reduce expenditure and

## CHRISTMAS MESSAGE FROM VRA HOSPITALS SBU

**A**s part of our end of year message to staff of the Authority, we wish to thank you for your support, assistance, hard work and dedication to duty.

Staff of the Authority are encouraged to ensure that they adhere to safety practices and also to embark on a healthy lifestyle now, during and after the Christmas festivities.

Furthermore, we encourage staff not to compromise on weekly exercise

this, in a nutshell, will enable the Authority achieve its vision.

Faith makes everything possible. Let us gather the spirit to convert the impossible to possible.

May the glow of prosperity, joy and happiness illuminate your life like a Christmas tree.

We wish you all Merry Christmas and a Prosperous New Year.

## CHRISTMAS MESSAGE FROM ENGINEERING SERVICES

**S**incere yuletide greetings to all our dedicated colleagues.

Just as the sun rises from the East and sets in the West each day, this year, 2016 has also almost drawn to an end. We ought to be thankful to God for His grace that enabled us to navigate our way through the hostile challenges, that continued to confront us throughout the year.

I would like to congratulate all our staff for their dedication and commitment to enduring

the challenges that faced us in the execution of our mandate. Your sacrifices are appreciated and would be rewarded at the appropriate time.

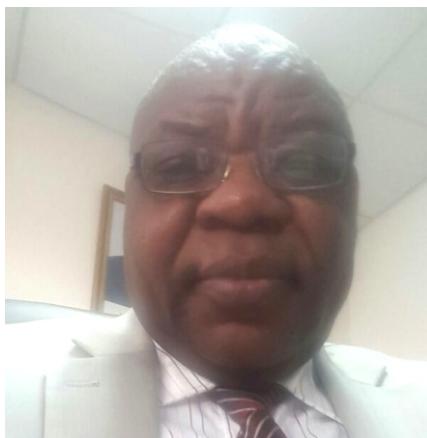
It is undeniable that the finances of the Authority for some time now has been quite precarious. However, in view of pragmatic efforts being made by Management, we hope to see light at the end of the tunnel.

I wish to urge all staff of the Authority and especially of the Engineering Services Department

to continue to play their roles devotedly, bearing in mind the cost of their activities.

I wish all staff of the Authority and the Department a Merry Christmas and a Happy and Prosperous New Year.

May we meet again in good health in the year 2017. God bless us all.



**JAMES JABARI NAPOUR**  
Director Internal Audit

## CHRISTMAS MESSAGE FROM INTERNAL AUDIT

**Y**et another year is about to go into the history books and it is as certain as the sun rises and sets. As beautifully as the earth goes round the sun, we have reached the time to look back and **Thank God**; look forward and **Trust God**; look around and **Serve God**; and, look within and **Fear God**. Yes, with the power of God within us we need never fear the perceived malevolent powers around us.

We have come this far because of our faith in the Almighty God from whom we draw our strength. In spite of the numerous challenges that confronted VRA and the nation at large during the year, we have

managed to narrowly sail through theragging lightning and thunder storms. Meanwhile some organisations that faced similar challenges either downsized, re-structured, re-deployed or collapsed with unpleasant consequences to their staff members and the national economy.

In our quest to "**add value to lives**" we contributed our quota to douse the flames of the monster christened '**dum-sor**' that engulfed the nation for three successive years, which sought to discredit our vigorous efforts to provide safe, reliable and uninterrupted power to the satisfaction of stakeholders. The power crisis has now largely been diminished but like "**hot ashes**" it is still smouldering. Nonetheless, with the proactive and protective measures and initiatives put in place by Management with the support of staff of the Authority, there is much hope for a bright future ahead.

Every successful person or entity has a painful story. Similarly every painful story has a successful ending. So with all the trials and tribulations in the energy industry we ought not throw our hands in despair but rather gird our loins and forge ahead as a **united team**, harmonised and fashioned in a friendly industrial atmosphere for a successful future.

As an assurance and consulting service department, and with our collective widows might, Audit did its utmost best to support the crusade embarked upon seeking to make the Authority a credible and viable enterprise in line with the department's universal ombudsman mission "**To enhance and protect organisational value by providing risk-based and objective assurance, advice and insight**". We pursued our mandate in retrospection with the Institute of Internal Auditors (IIA Global) motto that we have subscribed to: "**In God we Trust, All others we Audit.**"

Of course, we could not have achieved the strides we made in our service delivery without the support and collaboration of our stakeholders, particularly the Board of Directors, Executive, Management, Staff and our cherished clients. Above all, let us always remember that our present situation is not our final destination for the best is yet to come. There are windows of opportunities out there waiting to be taken advantage of.

On this happy note, I wish you all and your loved ones a Joyous Christmas and a Prosperous New Year!





## CHRISTMAS MESSAGE FROM HYDRO

The year is coming to a close and it is often good to reflect on the year gone by, not to criticize or ridicule, place blame or lament the things gone wrong. But rather, it is a time to celebrate what went right! There is time to consider the low points and move forward with optimism not to repeat any mistakes. It is a time to grow, to resolve that the next year will reap the rewards of the seeds sown.

Like many of you, I consider it a pleasure and an honor to be a member of the great Hydro team. So, it is pleasure to work here.

And it's a pleasure to be able to tell you, that despite some missteps along the way (a minor accident and a few near misses) there are more good deeds than bad. It is important to note as well that these good deeds are noticed, and more

importantly, the Authority appreciates all the good work you do. I know that you can sometimes put in a long day and wonder if anyone has really noticed. I want to reassure you: we do notice, we do appreciate what you do, we do value it, and we are grateful. So thank you for your dedication, thank you for your imagination, and thank you for being part of another very good year.

On a more personal note, a notable example of the types of exemplary workmanship displayed by our department is the Akosombo P&C team being awarded the innovative Corporate Best worker for the year 2015. If we're the ones to emulate, if we set the standard, we'll be the ones to gain the most ground. And so in the next year, we have some great opportunities to do just that and win more awards. I believe that we will work like this way in our future endeavours and so thank you for all the effort that has brought us to this point, and here's to a future that's every bit as bright as we believe it can be.

From next year we are going to re-organise the department by integrating into our Operations all other services, i.e., HR, Finance and Procurement to improve efficiency in the department in line with international standards; some of the benchmarks we have already signed onto.

I, once again would like to express my gratitude towards you all and wish you and your families a Merry Christmas and may you all have a healthy and prosperous 2017!

## CHRISTMAS MESSAGE FROM FINANCE

Dear Colleagues, it is my greatest privilege to wish you all a Merry Christmas and a prosperous New Year. The Authority is lucky to have dedicated and committed employees like you and would like to thank you for your hard work and commitment. May this Christmas season bring tons of success, good health, prosperity to your lives.

As you are aware, we had a lot of operational and financial challenges in our work during the year and with your support and dedication, we have survived the challenges. The Authority, as we speak, is still facing financial challenges. We are not out of the woods yet, steps are

however, being taken in conjunction with the Government and other relevant stakeholders to address the situation. It is my wish that as you celebrate the Christmas festivities you will continuously remember the Authority in your prayers.

Finally, we want to thank all of our customers and partners that worked with us throughout the year and express to them our sincerest Christmas Greetings and a Prosperous New Year.

God bless you and all your families.

*Merry Christmas to you all*

# CHRISTMAS MESSAGE FROM HUMAN RESOURCES



**GEORGE KORANTENG**  
Director, Human Resources

**O**nce again we have come to the end of another year. The year 2016 is gradually fading away and we are grateful to God for a successful year.

As we look back over the year we wish to express our gratitude to all our stakeholders, especially our staff groups, for their cooperation during the period.

We also commend all staff for working hard to ensure that the Authority achieves its set objectives and goals for the year.

There were challenges on the industrial front during the year but with the cooperation of our social partners the issues were largely contained.

Meanwhile efforts are being made to address all outstanding issues.

Going forward, we have set it as an objective to deepen our social dialogue processes, namely, our consultations, negotiations and information sharing approach for the mutual benefit of all our social partners.

For the coming year, the Human Resource Department is poised to, among other things, deploy a number of interventions to improve the overall human resource capacity of the Authority. Notable amongst these is Staff Rotation.

It has come to Management's notice that there is a critical shortfall in "all-round" skilled staff. Over the years, staff have generally performed the same duties or duties that are not very different from their direct responsibilities. This has led to a situation where staff are not well placed to enter the more competitive and flatter organisation envisaged by Management in the future.

It is therefore my hope that staff will take the opportunities created by the rotation programme to develop their knowledge, skills and a deeper appreciation of other jobs/positions to enhance their career development and prepare them for other responsibilities. A multi skilled workforce is a workforce that is well placed to face any challenges posed by change and/or development.

We trust that staff will embrace this and other HR initiatives to build a world-class organization that truly becomes "A Model of Excellence for Power Utilities In Africa".

I wish all staff a pleasant and restful break. Merry Christmas and a Happy New Year.  
God bless you all and God bless the Volta River Authority.





**Ing. ALFRED D. SACKEFIO**  
THERMAL GENERATION,  
WESTERN OPERATIONAL AREA

Dear colleagues,

The end of a year is a good time to look back, reflecting on achievements, and to look forward, to see what we still need to accomplish.

I have interacted with some expatriates who were privileged to witness the rough beginnings of the T1 plant and therefore did not have much hope in the plant operating beyond its 10<sup>th</sup> year. However on returning to Ghana, these expatriates are amazed to see that the plant is not only still running but it is better than how it was left back in the year 2000. To this, I say kudos to all the past and present staff and management of the plant, the VRA Management Team as well as the supporting departments.

In a department such as Thermal Generation Western Area, with over 200 staff working on a range of activities, it is not easy to single out activity for commendation.

## CHRISTMAS MESSAGE FROM THERMAL GENERATION, WESTERN OPERATIONAL AREA

But in this message to you, I want to look at a few particular moments through the year where I have been especially proud of what has been achieved. So at the outset I want to thank you all, especially those of you who have gone the extra mile to support Thermal Generation.

We began 2016 on quite a sound footing with operation in full Combined Cycle (CC) mode after having chalked a respectable CC availability of more than 80% at end of the preceding year, however sometime in the first quarter of the year, we run into problems on the generators of both gas turbines almost at the same time. And with the T3 plant still not Operational, the entire station at one point had no energy output albeit it was short lived. Amidst the cash flow challenges faced by VRA which would have delayed the engagement of generator experts, you guys dug deep and went the extra mile to restore one of the generators within a week. I must say, this brought a sigh of relief to all.

With the presence of the ESBI team, we continued a change process where we hoped to transform thermal operations to rank among the best in the world. We were faced with taking on additional responsibility when ESBI, who was spearheading the Change Programme had to depart site when their contract encountered difficulties. I must say even though we agreed to spearhead and

continue where ESBI left off, it has not been easy for the progress made in the closure of the "gaps" identified. Our attempt at marrying the operations /maintenance work with change process work encountered some challenges but it is my belief that those challenges would be surmounted in the coming year. This change process is something that we must pursue vigorously in 2017 as we believe it will make us stronger in all Areas of the business.

We need to develop various competencies and equip each other with multi skills as the competition in the industry becomes more fierce by the year. Having the said competencies which depends on people's talents is a must for the competitive world of business. However, there are certain factors listed below which are foundations for success and the good thing about them is that it requires zero talent to achieve them. We will therefore be building the foundations for success if we all exhibit all these 10 factors:

1. Being on time
2. Work ethic
3. Effort
4. Body language
5. Energy
6. Attitude
7. Passion
8. Being coachable
9. Doing extra
10. Being prepared.

It is team work that has kept the



## CHRISTMAS MESSAGE FROM THERMAL GENERATION, WESTERN OPERATIONAL AREA

department still going strong in spite of the changing scenes in the industry.

As the year draws to a close, it is my wish to thank you for all the hard work you have put in. You have demonstrated that when challenged you can rise to the occasion. So in the forthcoming year, we must brace ourselves to be purposeful, effective and efficient in all our activities.

Thank you for being an asset to Thermal Generation and VRA at large, a trust worthy subordinate to your boss and a source of inspiration for your colleagues. Thank you for keeping the torch of Thermal operation in VRA still burning in spite of the challenges both within and outside VRA. Merry Christmas to you all.

business-minded to ensure that we maintain our customers, and possibly increase our share of the electricity market. This department will continue to pursue new business areas and work towards reducing the cost of operation of VRA to make us more competitive.

I therefore urge the entire staff of VRA and especially staff of this department to play their

## CHRISTMAS MESSAGE FROM PLANNING & POWER BUSINESS

**T**he year 2016 has been another challenging year for the Authority but we can also be thankful for many blessings that we have experienced. I take this opportunity to thank all staff of the Planning and Power Business Department for all their efforts, commitment and support in these trying times.

Our Department continued to guide and monitor the strategic direction of the Authority, by administering the Corporate and Departmental Balanced Scorecard (BSC) system for monitoring organizational performance. We also monitored the budget of the Authority judiciously in the face of limited financial resources.

We maintained focus on all our customers, providing reliable and regular information especially during the period of the load shedding exercise. Our interaction with the PURC yielded some tariff adjustment in 2016 for regulated customers. We engaged consumers and stakeholders nationwide to justify the need to pay tariffs that covered the cost of production. We are very hopeful that the reasonable tariff adjustment will improve the Authority's finances.

The year 2017 is expected to be marginally better than 2016. We are starting the year with a better reservoir level at Akosombo Plant, than 2016. Arrangements between Government and Banks to pay some of the legacy debt will enable the Authority manage its finances better. As the competitive electricity market picks up speed, we need to be more

various roles with dedication, time consciousness and cost effectiveness in 2017.

I wish all staff of VRA and their families a very Happy New Year filled with good health and abundant blessings from God.





# HOME OWNERSHIP IS A STRONG ANCHOR FOR YOUR LIFE

...SPEAK TO **SHLS** NOW!

## Key Facts

### 2 Bedroom Properties - Average Rents

Tema (Estate)	GHS 800/Mth
Tema	GHS 500/Mth
Dansoman	GHS 500/Mth
Kasoa	GHS 400/Mth
Nsawam	GHS 300/Mth
Dome	GHS 600/Mth
Adenta	GHS 600/Mth

### 3 Bedroom Properties - Average Rents

Tema(Estate)	GHS 1,200/Mth
Tema	GHS 700/Mth
Dansoman	GHS 1200/Mth
Kasoa	GHS 800/Mth
Nsawam	GHS 600/ Mth
Dome	GHS 1000/Mth
Adenta	GHS 1200/ Mth

### Mortgage Interest Rates (Ghc)

HFC Bank	29%
Ghana Home Loans	32%
Fidelity Bank	13%
Ecobank	27.95%

### Inflation Rate - 16.7%

Contact:  
**Nana Adjoa Mensah-Darkwa (Mrs.)**  
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**Rosemond Akuffo-Okae (Mrs.)**  
 PLC: 728-128,

### Step#4

From the Land Title Registry applicant is issued a photocopy of the parcel plan together with a Request Form to be sent to the Lands Commission for a search report

### Step#5

Upon receipt of the search report by the Land Title Registry, and satisfying itself that there are no objections or adverse findings in the report, the Registry then proceeds to publish the application in the dailies to notify the general public of such application.

### Step#6

Counting from the date of publication, fourteen days' notice is allowed to receive objections from interested parties who may wish to challenge the application. If no objections are received within the fourteen day period the Registry then continues with the process of registration.

### Step#7

The Land Title Registry prints and sign certificates, records a particular on sectional plan and notifies applicants of completion of registration exercise. The Land Title certificates are finally issued out to applicants upon submission of their "yellow cards"

## STAFF HOUSING LOAN SCHEME SERIES

### LAND TITLE REGISTRATION UNDER THE LAND TITLE REGISTRATION LAW, 1986 (PNDL LAW 152)



The challenges arising from registration of instruments under the Land Registry ordinance and Land Registry Act 1962 Act 122 led to the promulgation of the Land Title Registration Law 1986 (PNDCL. 152) which is an improvement on the registration of deeds and interest in land. The Law provided for accurate parcel or cadastral maps which would reduce fraud, multiple registrations, reduce litigation and to prevent frauds on the purchaser and mortgages. It also provided for publication and adjudication of conflicts. Title certificates issued was indefeasible and can only be cancelled by a court of law.

As part of the registration process the Survey Department is required to prepare a parcel/cadastral plan which is recorded in the records of the Survey Department and the Land Title Registry to prevent multiple registration. The plan is vital to the whole process. Until an applicant's plan is received from the Survey Department, publication cannot be placed in the newspaper, a search cannot be conducted at the Lands Commission and there can be no spatial description in the Land certificate to be issued.

### PROCESSES INVOLVED IN TITLE REGISTRATION

#### Step #1

Applicant obtains appropriate registration forms from the Land Title Registry, completes and submits them to the Registry together with copies of all relevant documents and the required registration fees.

#### Step #2:

Upon submission of application an applicant is issued with:

- (i) A receipt of acknowledgment ("yellow card") and
- (ii) A letter of request addressed to the Survey Department for the preparation of parcel plans.

#### Step#3

Applicant pays for and collects parcel plans from the Survey Department whenever they are ready and submits same to the Land Title Registry to assist in the processing of their application

# RISKS RELATED TO ORGANISATIONAL CHANGE AND HOW TO MANAGE THEM

## INTRODUCTION

The Corporate Risk Management Unit's last Article for this year is focusing on the topical issue of risks related to organisational change and how to manage them.

We all agree that organisational change is necessitated by a fundamental strategy to remain relevant in a changing environment. An organisation that is able to change and manage the change well, will maintain its productivity and relevance over time. However, an organisation that is not able to change will become increasingly dysfunctional, unproductive and irrelevant.

## WHAT THEN IS ORGANIZATIONAL CHANGE?

Organisational change is the process of moving from established to new ways of thinking, behaving or working. It refers to the process in which an organization changes its structure, strategies, operational methods, technologies, or culture to reflect changes within the organisation or respond to factors external to the organisation, such as competition, changes in consumer tastes and preferences, economic policies of government, advances in technology and political and social conditions.

## TYPES OF ORGANISATIONAL CHANGE

There are three main types of organizational change, as briefly explained below:

**Developmental change:** improvement, refinement or enhancement of what already exists

**Transitional change:** moving from an old to a new state with activities oriented towards creating the new and 'switching off' the old.

**Transformational change:** fundamental changes in strategy, identity, global-view, mindset, culture; changes in 'who we are' and 'what we do'. This is sometimes referred to as discontinuous or disruptive change.

Each of these requires different types of effort and actions, and each carries different risks.

## AREAS OF FOCUS DURING ORGANISATIONAL

## CHANGE

It is important to focus on three main areas, to minimize key risks, during organisational change:

1. **Content:** what, specifically, is to change in the organisation. This includes processes, strategy, structure, technology, habits, ways of thinking, and/or culture (values and identity).
2. **Process:** how change will occur in the organisation. Considerations about process include who will direct and be accountable for aspects of the change, the speed of change, communication about the change, and monitoring change success.
3. **People:** the role that human dynamics will play in achieving successful outcomes (or otherwise) from the change, as well as the impact, that the changes will have on human dynamics. Particular consideration needs to be given to the emotional impacts of change and the behavioural responses prompted by the change.

## MAIN RISKS MILITATING AGAINST SUCCESS OF ORGANISATIONAL CHANGE

The main risks that thwart smooth organisational change are human beings ignoring, resisting or sabotaging the changes.

It must be noted that people across an organisation, from top management to the shop floor, have the ambition and aspirations to create a better institution. The question is; what then makes it difficult for people to embrace change?

## WHAT MAKES IT DIFFICULT FOR PEOPLE TO ACCEPT CHANGE

The root causes of difficulty of individuals to accept change are the result of:

- The Believe that something will be lost. These

could include status, power, security, career opportunities, relationships, etc., as a consequence of the change.

- Not understanding the positive intent and impacts of the change and believing that the changes are fundamentally unfair.
- Having different conclusions about the need for change than the organisation's Management, often because of different sources of information.
- Not understanding what is expected, due to information asymmetry.
- harbouring unresolved resentments. The changes may revive or exacerbate the resentments. Or else, the changes may provide an opportunity to act upon these resentments.

The above will be aggravated by emotions created by the change. The prospect of change could create positive or negative emotions. Those, who may be fed up with, or frustrated by the status quo, may be excited and energised by the new possibilities and opportunities. Others may see the change as an unexpected and unreasonable threat to their wellbeing and future happiness; an attack on everything they have worked for or hold dear; a threat to their ongoing employment.

Some of the most common emotional responses to change include:

- **Happiness:** Some people can be happy about the change, because it provides new opportunities or offers a resolution to old problems.
- **Sadness:** Others can feel a sense of sadness and sorrow if they interpret the changes to mean, primarily, that something good will be lost forever.
- **Survivor guilt:** This can be an emotional response to a situation where the change has involved staff losing their jobs, and an individual believes that they have 'survived' while others did not.
- **Helplessness:** Feeling of not being able to do anything about a situation. Helplessness is an emotional response to a situation that the individual is convinced that it is completely beyond his control. It can lead to a view by the individual that he is a victim. This can lead to withdrawal and disengagement.

- **Anger:** Anger can be a response to feelings of helplessness. It arises when an individual is convinced there has been a contravention of a basic value, such as fairness, freedom or the capacity to be in control.
- **Anxiety:** Anxiety is a constant state of uneasiness and apprehension, typically brought about by situations characterised by uncertainty or ambiguity.
- **Despair:** Despair is an emotional response to a situation that the individual is convinced is hopeless.

It is important to point out that everyone is likely to have some sort of emotional response to change. It is not limited to a particular gender or age group. However, the way in which people express or deal with their emotions is likely to differ as a consequence of the above and other factors, such as childhood experiences.

## MANAGING THE RISKS OF RESISTANCE TO CHANGE AND RELATED EMOTIONS

It is important to use the following different approaches, in managing these risks:

- **Communication:** providing information that directly addresses any missing information or misconceptions, and communicating about the consequences of accepting and of rejecting the changes.
- **Consultation:** asking people for their ideas about how to plan and implement the change. For example, staff may be asked about how the organisation could be structured to achieve better customer service
- **Education:** providing detailed insights into the issues or problems the change seeks to solve, the various options considered in the change, and the merits and drawbacks of each.
- **Providing a place for conflict:** providing opportunities for principled dissent-forums in which objections to current or proposed changes can be voiced, acknowledged, and, where practical, taken into account when designing organisational strategies.
- **Support:** Providing assistance to staff, including developing key skills required to accept the changes and giving empathetic encouragement that demonstrates an understanding of the concerns.
- **Negotiation:** coming to an agreement that, in

- exchange for accepting certain aspects of the change, there can be compromise on other aspects.
- Transparency:** being as transparent as possible, especially about what is known. Focus should be on whatever certainty can be provided, especially certainty of the immediate and short term. The use of short-term work plans and milestones can provide a measure of certainty even in the face of longer term uncertainty.

## CONCLUSION

In order to survive in the current competitive industry, organizations must have the ability and capability to adapt to and cope with the changing business environment. Identifying and managing the risks related to change, can help an organization take advantage of opportunities and ensure its survival and business continuity.

# AGENCY THEORY & VALUE OF MANAGEMENT AUDITING AS INTEGRATED AUDITING (PART 1)

Researched by: E. PAA KWESI LOKPO

## INTRODUCTION

**S**takeholders with interests in business entities and workers globally are familiar with the term "Internal Auditing" (IA). It is however, unclear whether they appreciate the value it brings to their organizations? Some schools of thought are of the opinion that it is an elusive profession and wonder why it is so critical to optimal governance and organizational sustainability. This article discusses the evolution of Internal Auditing and the value of Management Audit to the attainment of organisational goals. The fundamental principles of professional conduct prescribed by Institute of Internal Auditors (IIA) for its members are Integrity, Objectivity, Confidentiality, and Competence. Furthermore, IIA requires its members to live by other ten (10) Core Principles. Internal Audit activities are often referred to with the acronym GRC (Governance, Risk, and Control) all geared towards achievement of organisational objectives. GRC are defining activities of an enterprise.

**Governance, Risk, and Control largely determine an organisations ability to succeed in its market place.**

## EVOLUTION OF AUDITING

IIA observes that the profession of auditing has a rich and storied past. The earliest accounts of auditing date back to Mesopotamia, where marks were used to record ship cargoes and verify financial transactions. In ancient Rome, the term audit originated from the Latin word '**auditus**', 'a hearing', referring to the hearing of oral evidence as one official would verify records with those of another. Thus from ancient times on through industrial revolution, the term '**audit**' was

associated with '**hearing of accounts**'. With the emergence of limited liability entities in the eighteenth century and subsequently supported by legislations, auditing gradually became closely linked with examination of accounts, books, and relevant documentary evidence. Various developments in the twentieth century such as increase in size and complexity of business, acceptance of the idea of corporate social responsibility, increase in the level of consumer awareness, and other such factors have led to further enlargement in the scope of the term 'audit'. Earlier, 'audit' referred only to financial audit.

**Now, 'audit' includes any evaluation process undertaken to establish adherence to certain norms for accomplishing a stated objective. Auditing now refers to any evaluation process carried out systematically for a defined purpose and resulting in a n o p i n i o n , w h i c h i s communicated to interested parties through a report.**

## AGENCY THEORY AS BASIS FOR INTERNAL AUDITING



Agency theory underlies the emergence of Corporate Governance to deal with agency costs associated with adverse selection, moral hazards, and information asymmetry. Agency theory is centred on a number of antecedents, including the tragedy of the commons by Garret Hardin (1968). The tragedy of the commons denotes a situation where individuals acting independently and rationally according to their self-interest behave contrary to the best interests of the whole group by depleting a common resource.

Agency theory suggests that an enterprise can be viewed as a bond of contracts between resource holders. It proposes that, in imperfect labour and capital markets, company chief executives will seek to maximize their own worth at the expense of corporate shareholders (Jensen and Meckling, 1976). Agency costs are, therefore, costs borne by shareholders to encourage managers to maximize shareholder wealth rather than behave in their own self-interests. Jensen and Meckling (1976) theorise that in agency relationships the principal must incur some agency cost in order to limit the abnormal activities of the agent. They define agency costs as the sum of monitoring expenditures by the principal, the bonding expenditures by the agent and residual loss.

## **THE VALUE OF INTERNAL AUDITING AS A PROFESSION**

Researchers use the agency theory to assert that Internal Auditing, similar to other intervention mechanisms such as financial reporting and external auditing, helps to maintain efficiency in contracting costs between enterprise owners and managers. Christopher J., et al (2009) maintains that while the independent external auditors provide assurance to the shareholders on the quality of the financial statements, it is the independent Internal Audit function that provides assurance to the Board, via the Audit Committee. Consequently, they infer that agency theory, in this context, provides the basis for explaining the independent role and responsibilities assigned to the Internal Audit function. Hence management requires Internal Audit function to take on an extended role to

compensate for loss of control resulting from increased organisational complexity.

Internal Auditors engage in a myriad of activities to the extent that some critics accuse them of suffering from identity crisis. IIA's Standard 2100 require that IA activity should evaluate and contribute to the improvement of risk management, control, and governance processes using a systematic and disciplined approach.

## **ROLE AND RESPONSIBILITIES OF THE INTERNAL AUDIT FUNCTION**

Adams (1994) uses agency theory to explain the existence, role, and responsibilities of the Internal Audit function. He identifies Internal Audit as an important monitoring body that enables management to evaluate possible information asymmetry between principal and agent. Adams also postulates that organisations that are more complex are more likely to have Internal Audit function than the less complex. This is because complexity increases information asymmetry and the more information asymmetry the greater the need for monitoring to reduce this information asymmetry.

***The agency relationship is the basic principle behind the demand for and the growing importance of Internal Audit monitoring role in contemporary corporate governance.***

The foregoing are examples that agency theory help explain the existence of IA and the nature of IA function. The main elements that constitute the theoretical framework of an IA, however, are postulates, concepts, standards, procedures, and techniques. These must work together to achieve one overriding goal.

***The overriding goal is that IA must add value to and help the organisation, system, function, or activity it reviews to achieve its objectives.***

To be continued.



## doctor's corner

# OILING OUR WAY INTO THE GRAVE (Part 1)

Compiled by Dr. E.M. Sowah

**F**ats are organic compounds that are found in plants and animal cells in the form of lipids. A fat consists of one glycerol and three fatty acid molecules together referred to as triglyceride.

Fatty acids are vital components of the membranes of cells, they are also used to form hormones and other chemical messengers in the body and as triglycerides they are stored in cells as fuel reserves which are broken down to release energy.

Additionally, they are deposited under the skin and provide insulation and cushioning for the body and are also found around organs.

Fats constitute 22% of body weight in women and 15% in men, with women having on the average 35 million fat cells compared to 28 million in men.

Though important in the diet consuming the wrong fats or consuming them in excessive quantities has serious consequences. Our ignorance about fats and oils may be bliss but ultimately it hurts us in deadly ways.

### Types of fat

#### Saturated fats

These are found in meat and dairy products like milk, egg and cheese. Animal fats derived from sheep and cattle are largely saturated, whereas pigs and poultry have less saturated fatty acids and contain some polyunsaturated fatty acids.

#### USES OF SATURATED FATS

- Saturated fatty acids constitute at least 50% of the cell membranes. They are what gives our cells necessary stiffness and integrity.
- They play a vital role in the health of our bones as they are necessary for effective incorporation of calcium into the skeletal structure.
- They protect the liver from alcohol and other toxins, such as paracetamol.
- They enhance the immune system.
- They are needed for the proper utilization of essential polyunsaturated fatty acids. Elongated omega-3 fatty acids are better retained in the tissues when the diet is rich in saturated fats.
- Saturated fatty acids are the preferred foods for the heart, which is why the fat around the heart muscle is highly saturated. The heart draws on this reserve of fat in times of stress.
- Short- and medium-chain saturated fatty acids have important antimicrobial properties. They protect us against harmful microorganisms in the digestive tract.

#### DANGERS OF EXCESSIVE CONSUMPTION OF SATURATED FATS

Saturated fats and trans fats are the main dietary causes of raised blood cholesterol which is considered to be unhealthy for the heart. The [American Heart Association recommends](#) limiting saturated fats – which are found in butter, cheese, red meat and other animal-based foods. Decades of sound science has proven it can raise your “bad” cholesterol and put you at higher risk for heart disease.

#### TRANS FAT

A trans-fat is a normal fat molecule that has been twisted and deformed during the hydrogenation process. Trans fat (which means trans fatty acids) is the worst kind of fat, far worse than saturated fat. It is produced when liquid oil is taken through a process called partial hydrogenation to make it more solid and to provide longer shelf-life in baked products. It also provides longer fry-life for cooking oils, and provide a certain kind of texture or “mouthfeel.”

#### DANGERS OF TRANS FATS

Trans fats mimic natural fats in some respects, but are unnatural to the human body. No amount of trans fats is healthy. If the diet does not contain enough good fat, the body will use the deformed trans fats instead. Studies have implicated trans fats as contributing to major health risks from heart disease to cancer. Trans fats cause significant and serious lowering of HDL (good) cholesterol and a significant and serious increase in LDL (bad) cholesterol; make the arteries more rigid; cause major clogging of arteries; cause or contribute to type 2 diabetes; and cause or contribute to other serious health problems.

Common sources of trans fats (i.e. the ‘bad’ fats) include: margarine, vegetable shortening, fried fast-food doughnuts, processed food containing partially hydrogenated oils such as: hot chocolate, peanut butter, energy bars, crackers, cookies, cakes, pastries, biscuits, chips, imitation cheese, microwave popcorn and other snack foods.

#### Unsaturated fatty acids

Unsaturated fats come primarily from plant foods, such as nuts and seeds, and are liquid at room temperature Examples include vegetable oils such as olive, peanut, safflower, sunflower, soybean and corn. There are two types of unsaturated fatty acids; monounsaturated and polyunsaturated.

Polyunsaturated fatty acids are also referred to as essential fatty acids and are only available from food. They can be found in oily fish like mackerel, herring and salmon and also in oils like

Contd. on pg.22→

sunflower, soya and corn oils.

Polyunsaturated fats are broken up into the Omega 6 family and the Omega 3 family. Each of these families has a "parent" fatty acid, also known as the essential fatty acids, or EFAs:

- Alpha-linolenic acid (also called ALA or LNA) - the parent fatty acid in the Omega 3 family.
- Linoleic acid (LA) - the parent fatty acid in the Omega 6 family.

Technically, as long as the body has the parent fatty acid, the rest of the family can be made by the body. However, the body cannot make the parent fatty acids, thus the term, "essential fatty acids." Foods which serve as good sources of omega-3 fatty acids include the following:

- Flaxseed oil, perilla oil (50-60% omega 3 fatty acids)
- Canola oil, rapeseed oil (11% omega 3 fatty acids)
- Soybean oil (8% omega 3 fatty acids),
- Fish (salmon, mackerel, tuna, sardines)
- Omega-3 enriched eggs (EPA + DHA)
- Fish oil-eg. cod liver oil (EPA + DHA)
- Pulses (eg. beans), certain nuts/seeds (eg. walnut, linseed)

#### BENEFITS OF POLYUNSATURATED FATTY ACIDS (PUFA'S)

The essential fatty acids available in these oils namely omega 6 fatty acid and omega 3 fatty acid have been shown to lower the levels of cholesterol and triglycerides in the blood in addition to reducing the stickiness of platelets (blood cells responsible for clotting of blood). These activities both contribute to blocking of the blood vessels with its attendant problems, making these fatty acids very beneficial and an essential component of any dietary plan.

Research over the past 20 years has shown that increasing omega 3 fatty acid intake improves virtually every major degenerative disease of our time. This means all of the degenerative diseases that improve by increasing omega 3 fatty acid in the diet must be, at least in part, caused by omega 3 fatty acid deficiency. That's because omega 3 fatty acid can only reverse what is caused by omega 3 fatty acid deficiency.

#### DANGERS OF POLYUNSATURATED FATTY ACIDS

PUFAs are very vulnerable to damage from heat, light, and oxygen. If they're damaged by heat, moisture, light, and/or oxygen (for example, if they're used as frying oil over and over again, or just left out in a clear bottle on the shelf for months in a supermarket), they can get oxidized. Oxidized fats are dangerous because they're inflammatory. [Eating oxidized fats increases inflammation](#), and inflammation contributes to just about every chronic disease you could name, including obesity and diabetes.

The body functions optimally with a 2:1 balance of Omega 6 to Omega 3. The emphasis is on the dietary ratio of omega 6 to omega 3, rather than the absolute amounts of omega 3, that is critical for disease prevention, due to the competition between these two essential polyunsaturated fatty acids. Our ancestral diets contained Omega-6 and Omega-3 PUFA in a ratio between 4:1 and 1:1. Our modern diets have Omega-6 and Omega-3 PUFA in a ratio closer to 10:1, or even higher. In general, a high ratio of Omega-6 to Omega-3 promotes inflammation in the body, just like too much total PUFA.

An imbalance of Omega-6 to Omega-3 [harms gut health](#) and may be involved in problems as apparently unrelated as [depression](#), [chronic stress](#), [chronic pain](#), [autism spectrum disorders](#), inflammatory bowel disease, rheumatoid arthritis, and liver

disease and of course, cardiovascular disease.

Today, we have a problem of deficiency of Omega-3s. For many in the middle class there is need for less total PUFA with a lower ratio of omega 6 to omega 3. [Reducing omega 6 PUFA in the diet reduces inflammatory oxidative damage](#) but we can't "fix" the problem of omega 6 overload by drowning ourselves in omega-3 supplements to "balance it out." [omega-3s can be oxidized just like omega-6s, and eating oxidized omega-3s is just as inflammatory](#). Oxidation is however rare if you are getting your Omega-3s from whole foods like fish, but it's very common for supplements to be oxidized because they weren't stored properly or they were just low-quality in the first place.

Oil	Omega-6 Content	Omega-3 Content
Safflower	75%	0%
Sunflower	65%	0%
Corn	54%	0%
Cottonseed	50%	0%
Sesame	42%	0%
Peanut	32%	0%
Soybean	51%	7%
Canola	29%	9%
Walnut	52%	10%
Flaxseed	14%	57%
Fish*	0%	100%

#### MONOUNSATURATED FATTY ACIDS

Monounsaturated fats (MUFAs) are good fats, liquid at room temperature, they turn solid when they are chilled.

#### BENEFITS OF MONOUNSATURATED FATTY ACIDS

Monounsaturated fatty acids such as [oleic acid](#) is as effective in reducing serum total and low-density lipoprotein (LDL) cholesterol levels. Ecological studies indicate an inverse association between intake of monounsaturated fatty acids and CHD mortality. Relatively low coronary heart disease mortality rates in southern Europe is attributed to the traditional Mediterranean diet that is characterized by, inter alia, high dietary ratio of Monounsaturated fatty acids /saturated fat. Oleic acid exerts significant beneficial effects on atherosclerosis and thrombosis.

People living in Mediterranean climates have known for generations that a diet with monounsaturated fats is a recipe for a healthy heart and a slim body.

Other benefits include:

- Decreased risk for breast cancer. A study of women in Sweden found that those with diets higher in monounsaturated fats (as opposed to polyunsaturated fats) resulted in less frequent incidence of breast cancer.
- Less severe pain and stiffness for sufferers of rheumatoid arthritis. Diet plays a role in improving the pain and stiffness of those who already have rheumatoid arthritis.
- Reduced belly fat. A study published by the American Diabetes Association found that diets with monounsaturated fat could improve the loss of belly fat better than high carbohydrate diets.
- Besides, monounsaturated fat taste great!

Great sources of monounsaturated fats are olive oil, avocado pear and nuts such as almonds, cashew nuts and pecans.

Percentage of Specific Types of Fat in Common Oils and Fats*				
Oil/Fat	Saturated	Mono-unsaturated	Poly-unsaturated	Trans
Canola	7	58	29	0
Safflower	8	12	74	0
Sunflower	10	20	66	0
Corn	13	24	60	0
Olive	13	72	8	0
Soybean	16	44	37	0
Peanut	17	49	32	0
Rice Bran**	20	47	33	0
Cottonseed***	25	17	58	0
Avocado	10	70	20	
Almond	17	78	5	
Palm	50	37	10	0
Ghee	65	25	5	
Coconut	87	6	2	0
Lard	39	44	11	1
Butter	60	26	5	5
Palm Kernel	80	17	3	

### Types of oil according to processing method

There are three methods of extracting vegetable oils from nuts, grains, beans, seeds or olives.

The first is by use of a hydraulic press. This is an ancient method and yields the best quality oil. **The only two materials that will yield enough oil without heating them first are sesame seeds and olives.**

Therefore, sesame oil and olive oil from a hydraulic press are the only oils which could truly be called "cold pressed".

The term "virgin" for olive oil refers to the

first pressing by a hydraulic press without heat. The term "cold pressed" will refer only to hydraulic pressing without heat. These oils are the closest possible to the natural state, therefore have the most color, odor and flavor—in a word, the most nutrition—but they will often be unavailable because so little is produced this way. They are referred to as unrefined or crude oils. Most people do not fancy these types of unrefined oils because of their colour, taste and odour.

The final method is refining in which oil bearing materials are ground, steam cooked, then mixed with the solvent (of a petroleum base), usually hexane, which dissolves out of the oils, leaving a dry residue. The solvent is then separated from the oils. Refining is usually accomplished with the addition of sodium hydroxide and temperatures around 450 degrees. The refined oil is further processed through filtration, deodorization, bleaching. **This method is universally used by the big commercial oil processors because it gets more oils out quicker and cheaper. The truth is that minute quantities of these solvent remain in the refined oil with the potential for harm.**

**Refined oils are more susceptible to rancidity because the bleaching and filtration removes antioxidant components like chlorophyll, Vitamin A and others which reduces the resistance of oils to rancidity.** Rancidity promotes degenerative diseases caused by rancid oils by the destruction of vitamins E and A, both in the oil itself and in the body.

To cure the problem of quick spoilage, artificial antioxidants usually BHA (Butylated Hydroxyanisole) and BHT (Butylated Hydroxytoluene) are added to these oils, but although they are seen as safe in low doses, they have been shown to produce potential cancer compounds in the body; and have been linked to things like immune system issues, infertility, behavioral problems, and liver and kidney damage.

In the second part of this write-up recommendations regarding fats and oils would be made. WATCH OUT!!!

## VRA Code of Ethics

### 5.0 BENEFITS

This Code shall:

- I. Provide explicit guidance and standards to members of the Authority, Executive, Management and other employees on how to behave when confronted with ethical challenges.
- II. Provide new employees with ethical guidance and a sense of common identity.
- III. Provide the basis for continuous education and improvement in ethical and professional conduct of the Authority's business.
- IV. Inspire public confidence in the Authority, promote strong public image and enhance the Authority's reputation.
- V. Signal to suppliers and customers the Authority's expectation regarding proper conduct and generally acceptable standards of behaviour.
- VI. Promote a culture of excellence in the Authority by demonstrating the commitment of the Authority to ethical behavior.

### 6.0 APPROVAL AND OVERSIGHT RESPONSIBILITY

Members of the Authority shall approve this Code, oversee its regular review and

update as well as overall compliance with its tenets.

The Director, Human Resources shall be responsible for the official interpretation and revision of this Code as necessary in consultation with relevant stakeholders

### 7.0 RESPONSIBILITY FOR IMPLEMENTATION AND REVISION

Upon the approval of this Code by Members of the Authority, the Human Resources Department, in conjunction with relevant Department(s) within the Authority, shall be responsible for the implementation and revision of this Code. They shall ensure:

- a) That the Code is published and widely circulated among staff;
- b) That staff knowledge about the Code is regularly updated;
- c) That Heads of Departments, front-line Managers/Officers who handle the Authority's business are well-informed about their personal responsibilities under the Code;
- d) Periodic training in general work ethics and standards of conduct to staff, including mandatory induction courses for all new employees;

- e) That all other relevant measures including the establishment of a committee to monitor the ethical climate and handle resultant matters are instituted.

### 8.0 PROFESSIONAL CONDUCT

Certified professionals shall at all times be guided by the code of conduct of their professional bodies in their conduct and performance of the Authority's business. Other employees of the Authority shall at all times conduct their official activities professionally and with integrity.

Staff must be objective in exercising judgment and making recommendations. Nothing other than the best and proper interests of the Authority and its stakeholders shall influence decisions and actions of the employees of the Authority.

### 9.0 STANDARDS OF CONDUCT

All persons covered by this Code are required to exhibit values, standards and moral conduct that support the mission and values of the Authority and are expected to conduct themselves in a manner deserving of public trust.

**Continued on p.24**



**Come Partner us to make a Huge Difference!**

### **Our Mission:**

The Volta River Authority exists to **Power Economies & Raise** the living standards of the people of **Ghana & West Africa**

### **OUR VALUES**

- ☀ Accountability
- ☀ Commitment
- ☀ Trust
- ☀ Integrity
- ☀ Teamwork

← Contd. from pg.23

## **VRA Code of Ethics**

The following list is not all-inclusive but is intended to illustrate the minimum expectations for acceptable workplace conduct and performance for employees of the Authority:

- I. Report to work punctually, perform duties to expected standards and close on time
- ii. Seek approval from supervisors in advance for any changes to the established work schedule, including the use of annual vacation leave and late arrivals and early departures.
- iii. Perform assigned duties and responsibilities with the highest degree of integrity.
- iv. Devote full effort and attention to VRA during work hours.
- v. Maintain the qualifications, certification, licensure, and/or training requirements identified for their positions.
- vi. Demonstrate respect for the Authority and towards coworkers, supervisors, managers, subordinates, and VRA's agents, and customers.
- vii. Use the Authority's equipment, time, and resources judiciously and as authorized
- viii. Support efforts that ensure a safe and healthy work environment.
- ix. Utilize all forms of leave and related

employee benefits in the manner for which they are intended.

- x. Resolve work-related issues and disputes in a professional manner and through established corporate processes.
- xi. Meet or exceed established job performance expectations. Employees are expected to perform all duties with proficiency and due professional care. Incompetence or dereliction of duty will attract sanctions in accordance with applicable policies and procedures.
- xii. Make work-related decisions and/or take actions that are in the best interest of the Authority.
- xiii. Comply with the letter and spirit of all the Authority's policies and procedures.
- xiv. Report circumstances or concerns including any inappropriate (fraudulent, illegal, unethical) activities of other employees that may affect satisfactory work performance to Management or appropriate authority.
- xv. Obtain approval from the appropriate authority prior to accepting an additional appointment outside the Authority.
- xvi. Obtain approval from supervisor prior to working overtime.

xvii. Notify the Human Resources or Finance Departments immediately an overpayment or wrong payment is discovered on pay slip or paycheck.

xviii. Work as a team to achieve Departmental and Corporate goals and objectives.

xix. Conduct themselves at all times in a manner that supports the mission of the Authority and the performance of their duties.

### **10.0 CONFLICT OF INTEREST**

Article 284 of the 1992 Constitution of Ghana says "a public officer shall not put himself in a position where his personal interest conflicts or is likely to conflict with the performance of the functions of his office"

The Authority's service conditions define Conflict of Interest as: "where an employee at any level in the Authority makes, takes, or participates in taking, making or in any way attempts to use his official position to influence a corporate decision in which he knows or has reason to know he has a material, financial or any other interest."

To be Continued.

### **IN THE NEXT ISSUE:**

- Oiling Our Way Into The Grave (Part 2)
- 2016 End of Year Activities
- 2016 In Retrospect
- What Do You Expect In 2017?

Please send your concerns, questions, congratulatory messages, issues, worries, suggestions, etc., to [corpcomm@vra.com](mailto:corpcomm@vra.com)

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