From the Chief Executive's Office

VOLTA RIVER AUTHORITY

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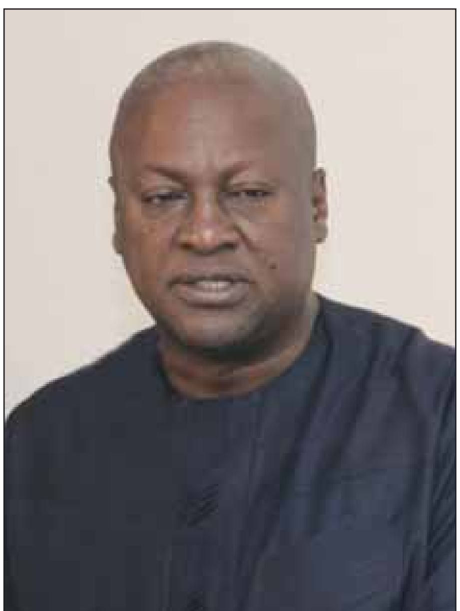
Energy Crisis Provides Lessons to Accelerate Ghana's own Gas Development And not to rely on supply from other countries

— *President John Mahama*


His Excellency, John Dramani Mahama
President, Republic of Ghana


Mr Kweku Awotwi
Chief Executive, (VRA)

President John Dramani Mahama has challenged stakeholders in the energy sector to see the current crisis as providing lessons for Ghana to accelerate its own gas development, and not to depend on gas supply from other countries.

He made the statement at a consultative meeting organised by the Public Utilities Regulatory Commission (PURC) for all stakeholders in the energy sector. The platform was to afford stakeholders the opportunity to discuss ways of mitigating the impact of the energy crisis on consumers and on industries.

Delivering his keynote address, President Mahama stated that "the damaged portion of the west African pipeline in Togo which supplied gas to the Asogli Power Plant has been fixed." He said the company was currently doing test runs and that in the next few weeks, gas supply could resume.

Mr. Mahama said while the country waited for gas from Nigeria, it should focus on generating power independently to feed the country. He said, "It was for that reason that the government had taken steps aimed at generating up to 5,000MW of power by 2016 to end power shortages and

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Our Vision

Setting the Standard for Public Sector Excellence in Africa

In this issue:

Energy crisis provides lessons

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From left to right: S.S. Sarpong, Executive Secretary, PURC, Mr James Bonney, Chairman of the occassion, His Execellency John Mahama, President of Ghana, Mr Alfred O. Vanderpruije, Mayor of Accra, and Alhaji Inssah Fuseni, Deputy Minister of Energy

Mr Kofi Adda
Former Minister of Energy

Cross section of partcipants at the event

Togbe Afede
Founding Partner, Sunon-Asogli

From left to right: Dr George Sipa Yankey, Director, Ghana Gas Company, Mr Charles Darku (2nd left), CEO of GRIDCo. and other dignitaries

> "the damaged portion of the west African pipeline in Togo which supplied gas to the Asogli Power Plant has been fixed."

VRA CE interacts with the media

make Ghana a net exporter of power," the President said.

President Mahama tasked the PURC to consider the introduction of demand-side management and time-use of machines, so that electricity can be managed in an efficient and resourceful manner. He urged the utility companies to communicate effectively and openly with consumers on issues regarding their operations because communication was important in the management of the situation

Mr. Kweku Andoh Awotwi, Chief Executive of the VRA, told stakeholders that the load shedding exercise which had come as the result of a shortfall in the supply of gas from Nigeria, was expected to be over by the end of November. The VRA was expecting an additional 300MW of power by November to take care of the 200MW deficit caused by inability of the Asogli Plant to produce owing to damage to the gas pipelines since the end of August 2012.

He said 200MW with the 300MW expected to be added to the generation system, was to come from the VRA and the additional 100MW from the SSNIT-owned CENIT Plant at Tema. 200MW of this was to replace the 200MW deficit from Asogli Power. An additional replacement of 100MW would effectively end the load shedding being managed across the country. Mr. Awotwi said if WAPCo started supplying gas and Asogli came up to produce, an additional 200MW would be added to the system. This, he said, would serve as a reserve and effectively stabilise the power system.

He noted that the shortfall in the gas supply had had a strain on VRA's finances, because the Authority had had to buy crude oil at a high price to fire its thermal plants.

Mr. Charles Darku, Chief Executive Officer of GRIDCo, noted that the distribution network and the generation situation were getting better. He observed that isolated situations could arise for which load-shedding could not be ruled out.

> **"It was for that reason that the government had taken steps aimed at generating up to 5,000MW of power by 2016 to end power shortages and make Ghana a net exporter of power"**

VRA HOLDS 2ND LOCAL CONTENT STAKEHOLDERS' FORUM

The Volta River Authority (VRA) has hosted a Local Content stakeholders' forum in Accra to take a critical look at the issue of local content particularly in the power utility industry.

The second to be hosted by VRA, the forum took place on Sunday, December 17, and brought together more than 60 participants from all the power utility entities in the country.

The theme of the forum was: "Promoting Local Content Development in the Power Utilities and Related Industries in Ghana – Achievements and Sustainable Initiatives."

VRA's Chief Executive, Mr kweku Andoh Awotwi, opened the forum with a call on all stakeholders to join in a concerted effort to bring together the fragmented policies within the various sectors into a national policy that should enhance the participation of local businesses.

UT Bank Chief P.K. Amoabeng, 2nd right, with other dignitaries on the high table

He noted that the main aim of the forum was to provide a guide to the general adoption of local content by power utility companies in Africa, and while it was designed to provide the guideposts in efforts at promoting Local Content development in the power utilities, it was also expected to set out a number of actions that, together, constitute the elements of a policy for promoting Local Content in public infrastructure delivery and actions for increasing local content.

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VRA's TIME CAPSULE (TC)

VRA's TIME CAPSULE (TC), is a repository of corporate objects, preserved to tell the story of life over the last 50 years of existence. The TC was interred on Friday, 14th December 2012 at the forecourt of the Akosombo Hydro Generating Station at 9.00 am GMT.

The Time Capsule is a square stainless steel container to preserve VRA's artifacts, memorabilia, technical reports, drawings, pictures and documents relevant to its past, 50th Anniversary, the present and guide to the future.

The Capsule, provided by the International Time Capsule Incorporated, Atlanta, USA, is guaranteed to last 500 years, even against fire and flood damages should they occur where the Capsule is stored.

The Society which maintains the registry of all known Time Capsules also educates the general public and the academic community on its value and encourages the study of the history establishing such capsules.

LAUNCHED IN PICTURES

VRA'S 3RD ANNUAL STAKEHOLDERS' MEETING

Ladies and Gentlemen, I bid you welcome to the Third Annual Stakeholders' meeting of the Volta River Authority. For the VRA, the year 2011 had two main features. On the one hand, very strong financial and operational performance by the Authority; on the other, worrying signals from the macro energy environment – for VRA, but also for the energy sector as a whole.

THE GOOD NEWS

Let me start with the positive. Net profit for VRA more than doubled, from GHS40.6 million in 2010 to GHS82.6 million in 2011, while operating profit stood at GHS140.5 million, making this the third successive year with an operating profit, and the second year of triple-digit growth, (2009: GHS 11.3 million; 2010: GHS 53.3 million; 2011: GHS 140.5 million). This has been altogether a level of performance not seen in over two decades.

Revenue from the sale of electricity increased modestly, from GHS1.077 billion the previous year to GHS1.11billion in 2011, while units of electricity sold increased marginally from 9,669 GWh in 2010 to 9,814GWh in 2011. On the tariff side, the weighted average Bulk Generation Tariff (BGT) went up by 3%, ending the year at GHp 8.45/kWh, effective December 1, 2011.

Turning to generation and power supply, the Akosombo and Kpong plants combined to perform at 96.5% plant availability; the new Tema thermal plant posted over 80% plant availability; and the Takoradi gas turbines recorded 90% plant availability, the highest performance since the plant was put into service back in 1997. On the negative side, however, the Takoradi steam unit was out all year on repairs.

Prof. Akilagpa Sawyerr
Board Chairman, VRA

Mr Kweku Andoh Awotwi
CE, Volta River Authority (VRA)

The arrival of gas from Nigeria made a significant contribution to the Authority's healthy results in 2011; but so did the range of management interventions that we have introduced. Together, these factors enabled us to post the best operational performance in recent memory - increasing total plant availability, thereby decreasing the unit cost of every kilowatt of electricity produced.

For the immediate future the Authority has made a stable supply of gas to its thermal plants a key priority. We are, therefore, actively engaging with gas producers in Nigeria as well as the Ghana National Gas Company. In addition, we are approaching suppliers of non-conventional sources of gas, such as Liquefied Natural Gas (LNG), to determine whether these sources could be made economically feasible.

Financial Health

Improved financial performance has meant a stronger balance sheet and increased liquidity. The Authority's debt levels dropped to 7% in 2011, down from 22% just four years earlier. It was also better able to pay its bills on time, with more cash on hand. Finally, the Authority has developed a hedging programme to ensure budget stability, which will start once the National Risk Management Committee approves the programme and incorporates it in the larger Government framework.

Portfolio Growth

While no new capacity was brought into service in 2011, a number of ongoing projects are expected to add 500 MW in new capacity in the near future. These include:

- A 132MW (T3) (Magellan) plant at Aboadze, expected to be completed before the end of 2012;
- Conversion of the 220MW Thermal Plant of Takoradi International Company (TICo) into a 330MW combined cycle plant. We are in the process of raising finance for this and

Participants at the stakeholders' forum

construction is expected to start in the second half of 2012;

- Development of 110MW renewable energy - wind and solar – beginning with the construction of a 2MW solar plant, and one year of wind measurements, both to commence in 2012;
- Commencement of feasibility studies for the development of 140 MW of hydro dams at Pwalugu and Juale in the Northern Region.

Commercialisation of Non-Power Functions

The year 2011 saw sharply improved performances in the Authority's non-power areas. Our operating subsidiaries, Akosombo Hotels Limited (AHL) and Volta Lake Transport Company (VLTC), both recorded net profits: AHL for the first time in over ten years; VLTC for the first time in over twenty-four years. Key to this improved performance was the appointment of professional managers in 2010 and 2011, which has brought years of industry experience to turn these operations around.

To the same end, business plans have been, or are in the process of being, developed for all the other areas: Kpong Farms Limited (KFL); the schools' the health services' and the real estate department. These business plans will serve as templates for the engagement of private investors that the Authority expects to partner with, as part of the on-going power sector reform.

Extensive staff sensitisation was also undertaken as part of the transformation of the Northern Electricity Department (NED) into the Northern Electricity Distribution Company (NEDCo), a standalone, wholly-owned, subsidiary of VRA.

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"The arrival of gas from Nigeria made a significant contribution to the Authority's healthy results in 2011; but so did the range of management interventions that we have introduced. Together, these factors enabled us to post the best operational performance in recent memory - increasing total plant availability, thereby decreasing the unit cost of every kilowatt of electricity produced."

VRA LAUNCHES MALARIA CONTROL STRATEGY

Ing. Kirk Koffi, DCE(E&O) making his opening statement

As part of its Safety Awareness Day across the country, the Volta River Authority has launched a corporate malaria control strategy document to ensure a malaria-free future.

The control strategy document produced by the Health Department and Public Health section had been designed to help mitigate the rising malaria death risk faced by staff and inhabitants of the Authority's impacted communities.

Launching the strategy document on behalf of the Minister of Energy, Ms. Alexandra Totoe, VRA Deputy Chief Executive, Finance, explained that the VRA operates a definitive health and safety policy because of its great dependence on water, the breeding medium for mosquitoes, for electricity production.

She said malaria cost the Authority GH₵82,943.84 approximately $52,000 in 2011 from various health care services administered to staff, relatives of staff and about two million inhabitants of the Volta Lake communities.

Ms. Totoe said for the Authority's health and safety principles, to be effective, staff must get involved and commit and foster a positive health and safety culture with the principles outlined in the strategy document.

She said VRA would use the strategy document to achieve its intended purpose of affirming its primacy of workplace health and safety.

Dr. Emmanuel Fiagbey, Country Director for Johns Hopkins University, advised Ghanaians to adhere to the principles outlined in the malaria control document, in order to enhance the productivity of every worker and reduce the high health-care cost documented by health authorities nationwide.

Deserving observers of the corporate safety regulations and principles were rewarded. The Takoradi Thermal Plant Station (TTPS) emerged first, followed by Akosombo and Kpong Generating Stations.

Speakers at the event

Participants at the event

The programme received support from the Johns Hopkins University, Ministry of Energy, and some professional ad-hoc stakeholders in health and safety across the country.

Chief Executive Commends Ashong for innovative solution

Mr. Richmond Dorttey Ashong, a young Assistant Engineer recently employed at the Akosombo Hydro Generation Department, designed a dashboard and written a software program that makes it possible to view total power generation from both the Akosombo and Kpong Generating Stations in real time.

CE Kweku Awotwi in a handshake with Richmond Ashong. In the picture are DCE(E&O) - Ing. Kirk Koffi, Director of Human Resources - Isaac Aidoo and Director of Hydro Generation - K.B. Amoako

In 2006, the Protection and Control (P&C) team at Akosombo Generating Station installed power Nexus monitors on each of the generating units and associated station service. The monitors display real time power parameters, i.e. Voltage (V), Current (I), Active Power (MW), Reactive Power (MVAR), Power Factor (Pf), Frequency (Hz) and Harmonics. They also store historical data and in their current application, serve as data acquisition device and sequence-of-event recorders.

However, efforts to automatically sum up power generation from each generator in real time and display it on a single platform (power totalising) for timely management decision making had become a real challenge. IT specialists, including the equipment manufacturer, could not help VRA resolve the difficult challenge.

This year, the installation of Nexus power monitors was extended to include Kpong GS generators and associated station service. But, power totalising still remained a challenge.

That's where Mr. Richmond Dorttey Ashong came in. He designed a dashboard and wrote a program that sums up power generation from both Akosombo and Kpong Generating Stations in real time, and displays the information on the dashboard. Now management and staff can view real time power information from the two hydro plants from right behind their desks. This application can be viewed only over the VRA Network.

The Chief Executive, Mr. Kweku Andoh Awotwi, met with Mr. Ashong and personally congratulated him on his achievement.

As the saying goes, "He who climbs a good tree deserves to be helped". The Management of Hydro wishes to join the Chief Executive in commending the effort of Mr. Ashong, whilst pledging our unflinching support to those who dare to take up innovative challenges.

VRA celebrates home-coming with Akwamu

The Volta River Authority has donated Ten Thousand Ghana Cedis (GH¢10,000.00) to the Akwamu Traditional Area to support the Odeneho Kwafo Akoto III Educational Trust Fund whose aim is to provide scholarship to Akwamu citizens from Basic to Tertiary education.

The VRA donation was in line with the Authority's Community Development Programme for supporting education in communities impacted by the Authority's operation. VRA's support for education is not limited to donating to educational trust funds set up by traditional areas in communities in VRA's operational area. It also provides computers, exercise books and other learning materials, in addition to scholarships and support towards the building of schools and teachers' quarters.

GRIDCo HOSTS AND WINS

The Ghana Grid Company Limited (GRIDCo) has been adjudged overall winners of the 3rd Inter-Utility Power Games held at the Akuse Club House on September 29, 2012. Participants in the one day competition were from PURC, Ministry of Energy, NEDCo, ECG, VRA, Asogli Power, and Bui Power Authority.

In his opening address, the representative of the Minister of Energy commended the organisers for coming up with the idea of the competition and urged the participating teams to compete fairly and use the opportunity to interact among themselves. He noted that, considering the challenges facing the sector, all staff needed to be sound both in body and in mind, to be able to effectively execute their mandates.

Mr. Kweku Awotwi, Chief Executive of the VRA advised the participating teams to continue to work hard in order to attain excellence in all their endeavours, especially in these times when the sector was faced with many challenges.

Commending his staff for their colossal contribution to the Authority's mandate in the last fifty-one years, Mr Kweku Awotwi urged them to strive harder to ensure that VRA competed favourably in the emerging energy market.

The participating teams congratulated GRIDCo on its success. The 3rd Power Utility Games sported among others, football, table tennis, scrabble, tug of war, musical chairs and volley ball. The event was climaxed by plenty of food and drinks for attendees and created an avenue for socialisation.

3RD POWER UTILITY GAMES

POWER UTILITY GAMES IN PICTURES

VRA Celebrates Kloyosikplemi with Yilo Krobo

The chiefs and people of the Yilo Krobo Traditional Area have celebrated their annual kloyosikplemi festival, under the theme "Unity for Development,"at the Akutunya Park at Somanya.

The acting Konor, Osayem Tetteh Odonkor, in his good will message said he was grateful to citizens of Yilo Krobo for honouring and actively participating in this year's festival.

He noted that the festival marked the migration of their ancestors from the Krobo Mountains to their current place of abode.

He further entreated them to do much better in the coming year by adding value to the area's mango production.

He thanked the government for improving their water supply by providing boreholes in the Municipality.

Speaking at the function, the Eastern Regional Minister, Mr Victor Emmanuel Smith advised the youth to take education seriously, since it held the key to success and development.

Ing. Isaac Kirk Koffi, VRA's Deputy Chief Executive (Engineering and Operations) who was the Chairman of the Planning Committee, said the celebration showcased the rich culture and tourist potential of Yilo Krobo. He said it was a period of stock-taking and urged all to participate fully in all the programmes, comport themselves, show love, respect one another and, most of all, be mindful of the effect of social misbehaviour.


Ing. Isaac Kirk Koffi (right) with Asafoakye of Yilo Krobo State

The VRA donated Five Thousand Ghana Cedis to support the festival and wished the chiefs and people well.

Press Update

West African Gas Pipeline Company says pipeline will be ready soon

The Chief Executive Officer of the West African Gas Pipeline Company (WAGPCo), Mr. Charles Adeniji, has given the assurance that the gas pipeline which was damaged on August 28, would soon be ready for operations. He said this when giving an update on the damaged pipeline at a press conference in Accra.

Mr. Adeniji said after preliminary assessment, the location and the extent of the damage had been identified; that the pipeline itself had been severed into two parts, and that six sections of the main pipeline had also been damaged.

He said the company was removing water and debris that had entered the pipeline after the damage. This, he said would be done by launching Pipeline Inspection Gauges, called 'pigs' at the Nigeria end of the line that push out the water and debris through the Takoradi end. The process, he said, would be run several times to ensure that the pipeline was clean.

Mr Adeniji explained further that after the pipeline had been dried, compressed gas or nitrogen would be used to push out the 'pig' which were expected to dry up the internal surface of the pipeline. He said, "The amount of moisture in the gas will show the level of dryness of the line and indicate when 'pigging' can be stopped." The operating valves would then be opened and gas introduced into the line, to commence gas transportation.

He said WAGPCo would make every effort to intensify stakeholder engagements and ensure effective collaboration with relevant agencies and organisations to avoid a recurrence of the accident.

HEADS OF UTILITIES INTERACT WITH SENIOR JOURNALISTS ON ENERGY

Heads of the Power Utilities — the Volta River Authority (VRA), Ghana Grid Company (GRIDCo) and the Electricity Company of Ghana (ECG) — have interacted with a cross section of Senior Journalists in Accra.

The objective of the interaction was to give the utilities a platform to engage the media on the current energy situation, steps being taken to return the situation to normal and the way forward.

Giving an update on the situation, Mr. Kweku Andoh Awotwi, Chief Executive of the Volta River Authority, said that the repair of the West African Gas Pipeline began in September, was completed in mid-October, and the WAGPCo was in the final stages of preparations to resume operations. The flow of gas, he said, was therefore likely to commence by the end of November, 2012.

Mr. Awotwi noted that peak power demand in Ghana currently stood at 1705MW while total available capacity was now 1601MW. This, he said, accounted for the shortfall of 104MW. Mr Awotwi said currently all six turbines at Akosombo together with three at Akuse were running at full allowed capacity. The fourth unit at Kpong, he said, was down for emergency repairs. All four thermal units at Aboadze were running at full capacity and the steam turbine, also at Aboadze which had been down for much of the year , was now producing 50MW. He was hopeful this would be increased to full capacity after successful test runs.

At the high table, from left to right: Mr Kweku Awotwi, CE, Mr Charles Darku, CEO, GRIDCo., and Mr Robert Dwamena, Ag. MD, ECG

Participants at the function

Mr Awotwi identified a number of projects whuch, he said, had been targeted to add to production capacity and thereby improve system stability.. He said the Takoradi 3 (T3) plant had commenced production, with 21MW. This was expected to increase to 80MW by the end of November. Additionally, he said, the SNNIT-owned CENITgeneration plant; would commence production in November, with the availability of crude oil.

The CE said the Kpong Generating Station (KGS) was expected to be restored to full service by November 12, 2012. In addition, it was expected that gas supply from Nigeria would be restored by December, so that Sunon Asogli could add an additional 170MW. T3 was also expected to operate at optimum capacity at 110MW by December.

The journalists expressed indignation at the poor manner in which load management exercise was being performed. They argued that serious inconsistencies in the load shedding were causing great disservice and inconveniences to consumers. Another issue raised was the quality of meters being deployed by the ECG.

Addressing their concerns, Mr. Robert Dwamena, Director, Procurement of the ECG, who represented the Managing Director, promised that ECG would improve the load management. He denied that the new prepaid meters were faulty and remarked that the quality of the meters supplied to consumers had been quite efficient in determining customers' consumption.

VRA TOP 100 ATTEND WORKSHOP...........................

"Innovation Shapes Future of Companies" – Prince Kofi Amoabeng

Mr Prince Kofi Amoabeng, Chief Executive Officer of UT Bank Ltd., has emphasised the importance of innovation management in shaping corporate success.

Sharing his thoughts as guest speaker at the VRA TOP 100 forum on his skills, resources and vision in founding UT Bank, Mr Amoabeng stressed the need to keep systems and processes simple, and to create a congenial working environment with facilities for training and learning, and sharing knowledge and information in an open door policy.

Relating his experience on the theme of the forum; **"Towards Improved Productivity and Entrepreneurship"**, Mr Amoabeng mentioned positive reinforcement schemes to celebrate success and reward excellence. He said an excellent organisation builds, a family feeling and togetherness, as well as team spirit, to achieve corporate success.

Organisations that seek to achieve excellence, he said, must bring out the best in people and respect their employees.

"Everybody should feel part of the company. Let people feel that they are part of the system. Learn to respect people. And living the values of the company must start from the top. Every human being wants to be respected," he said.

"You must be disciplined to a fault and create the right values and internalise them," Mr Amoabeng said.

The VRA TOP 100 is a forum that seeks to address challenges within the VRA in an open and frank discussion among VRA professionals.

Mr Prince Kofi Amoabeng has for three consecutive years been adjudged Ghana's most respected Chief Executive Officer. He founded the world class UT Bank from scratch as a savings and loans financial service provider.

CE Kweku Awotwi welcomes Top 100 participants

UT Bank Chief P.K. Amoabeng speaks at the VRA Top 100 conference

VRA's 3rd Annual Stakeolders' Meeting........ Contd. from p6

Performance Management: The Balanced Scorecard

The current Board inherited a system under which an annual bonus of a month's salary was automatically paid to staff at the end of each year. This has been replaced by a performance management system with a built-in performance-related incentive scheme. The new system, the Balanced Scorecard, provides a framework for aligning individual performance with departmental and corporate goals, and assessing and rewarding performance accordingly. Launched in 2011 after a long period of preparation, the first year of the system has proved quite successful, already changing staff performance and motivation, despite the teething problems.

Golden Anniversary: Fifty Years of Volta River Authority

The year 2011 marked the 50th anniversary of the establishment of the Volta River Authority. In that Golden Jubilee Year, celebrated under the theme, Excellence through Commitment and Innovation, we acknowledged and paid tribute to the men and women of the Authority, past and present, whose commitment and hard work have accounted for the achievements and growth of the Authority through the years. I, therefore, take this opportunity to salute VRA management and staff down the years, and dedicate this Jubilee Year report to them.

THE CHALLENGES

Despite the impressive financial and operational results outlined above, we had cause to be concerned in 2011 about several significant challenges within the Authority and in the power sector, generally. Foremost among these is the insufficient capacity reserve margin available in Ghana's electricity system. Over the last two years, this margin has dwindled from about 15% to less than 5%, even though the ideal margin is over 20%. Ghana's rapid growth in electricity demand, at over 10% a year for the last three years, itself fuelled by significant GDP growth, is largely responsible for eroding this reserve margin. But, the situation has been compounded by the decision to jump start the aluminium sector by operating the VALCO plant during 2011. Although this was to be at only 20% capacity, it requires a base-loading of 70MW, and that has further eroded the already limited reserves.

Unfortunately, growth in new capacity has not kept pace with demand. It has not helped that VRA's own steam turbine was down for repairs for the whole of 2011. That would have supplemented reserves by 110 MW. Nor has it helped that the completion of the Takoradi 3 project was delayed by over six months because unanticipated variation orders were critically questioned by Parliament. That would have added a further 132 MW.

Several VRA and third party projects, though not intended to be completed in 2011, have been delayed for a variety of reasons. This is not surprising, as these capital-intensive projects, which typically cost not less than US$100 million and take three to four years to complete under the best of circumstances, typically take five to seven years for all manner of reasons, despite our best intentions.

At a more general level, in my Report to this forum last year, I drew attention to the need for ". . . the articulation of a holistic and realistic national energy strategy, followed by the decisive deployment of appropriate and adequate institutional and human resources in its implementation. This, we believe, will include, but transcend, the establishment of the appropriate regulatory framework and pricing regime to ensure the timely closing of the country's energy generation capacity gap.

"While this calls for the concerted effort of all stakeholders, leadership remains inescapably with the government and the public agencies that have responsibility for sectoral and cross-sectoral policy making."

Since then, have Independent Power Producers received appropriate guidance and clearly laid-out rules to encourage them to invest the large sums of money required? Have steps been taken to plug our leaky distribution

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While this calls for the concerted effort of all stakeholders, leadership remains inescapably with Government and the public agencies with responsibility for sectoral and cross-sectoral policy making.

sector to ensure that any generation investment, public or private, can be adequately and easily financed, in the expectation of a fair return on invested capital? Has the VRA received a cost-reflective tariff, transparently administered, in order that it can become genuinely financially self-sustaining?

If these challenges are not addressed head-on, how can we be assured that the country's anaemic energy capacity reserves will be brought up to industry standards to ensure sustainable provision in the coming years?

Unfortunately, this year, 2012, is reflecting some of our worst fears. Gas volumes from Nigeria fell by 45% in the first half of the year and completely dried up in the second half, the net result being the immediate reduction of 180 MW from the Sunon Asogli plant, and the subjection of VRA's own plants to great stress as they attempted to switch back and forth between the use of liquid fuels and natural gas. With an already razor-thin 5% reserve margin, the unsurprising result has been load-shedding for a portion of the population, causing much inconvenience and understandable dissatisfaction all round.

VRA's 2011 gains, impressive as they appear, thus, remain fragile within a utility sector in need of substantial reform, overhaul, and co-ordination. If I may anticipate next year's report, a 100% increase in the use of crude oil during 2012, procured at twice the price of natural gas, with the PURC tariff remaining unchanged over the period, immediately reverses the gains that the Authority made in 2011. Thus, the prospect of a financially self-sustaining utility sector – not just the VRA - recedes from view, even as we recount the successes of 2011; even as the promise of the more abundant electricity future that we all wish for is put at serious risk.

CONCLUSION

I have given a faithful account of the impressive results achieved by the VRA in 2011 and, indeed, throughout the tenure of the current Board. Yet, as signaled by the difficulties of 2012, these gains cannot be taken for granted. They remain extremely fragile and need to be nurtured and protected.

VRA must play its part in this process by raising its game at all levels of the organisation, in both the power and non-power areas. For any effort by VRA to succeed, however, requires the formulation and better coordination of a macro energy policy, as well as the firm and unwavering commitment and support from VRA's key stakeholders - its utility sector partners; its regulators; and above all, the government.

Ghana occupies a unique place on the energy map of the West African region. Recent finds of natural gas offshore have positioned the country to supply inexpensive gas-fired power to its neighbours on a large scale. But we will not be able to take advantage of these opportunities with a crippled and poorly-managed national electricity sector.

VRA has used the last 50 years to establish a firm foundation, and has generally served Ghana well. It is the dedication of its management and staff, now 3,010 strong, that made it possible for us to end 2011 with a strong balance sheet and cash position. And despite all the challenges and the uncertainties in the current economic environment, VRA kept open real possibilities for continued success in the coming years.

I am deeply conscious of the fact that VRA cannot succeed without the collective support and commitment of all our key stakeholders. We look forward to working with you to realise a brighter future for the VRA, the power sector, and for all of Ghana.

VRA HOLDS 2ND LOCAL CONTENT STAKEHOLDERS' FORUM

Contd. from p3

Mr Awotwi said that the Local Content policy of VRA – largest of Ghana's power utilities – was that all energy stakeholders and regulatory authorities needed to aim at increasing local labour and goods and services in the delivery of infrastructure projects.

In his wide-encompassing address Mr Awotwi noted that Local Content was already a well recognised phenomenon in the oil and gas industry and that ownership or location were the usual criteria in the procurement of works, with added value more likely in the procurement of goods and services.

He said "Local Content" in developing countries was an issue recognised by the multi-lateral development banks, the World Trade Organisation and all major UN agencies. For, they had immediate benefits in increased opportunities for local people to earn income through employment and in infrastructure procurement. And there would be better opportunities for local businesses as contractors, sub-contractors, producers or suppliers of materials and equipment and increased local knowledge and skills.

The longer term outcomes were poverty reduction, inclusive economic growth and more sustainable infrastructure. But currently, he noted, much of the funding invested in infrastructure in developing countries did not benefit the contractors and suppliers of those countries. For instance the African Development Bank had reported that less than 40% of new works contracts went to countries from the continent, and those included foreign (and local) contracts awarded to international companies (e.g., from China) that had set up offices in African countries.

One other important observation of Mr Awotwi was with regard to the reliance on foreign design and construction of facilities. That, he noted, often meant that those facilities were not sustainable, as the expertise might no longer be available once construction had been completed.

Mr Awotwi noted that at the moment the playing field was not level because one side was much seriously weaker than the other. In that case, he suggested, "the playing field needs to be tilted to favour the weaker side." "This implies," he said, "that international agencies should support the idea of using procurement as a tool to develop local industries through the offer of special incentives to local enterprises."

Another area where local enterprises were disadvantaged had to do with tax concessions. It is a fact that in many cases the law gives foreign companies tax incentives, while actually denying them to local companies. Mr Awotwi quoted a recent study in Ghana, where contractors complained of having to pay import duties and VAT on metal formwork imported from Spain, while the law allowed foreign contractors to bring in such items duty free.

Mr Kweku Awotwi
CE, VRA

These factors, said Mr Awotwi, combined to ensure that providers of construction services in developing countries, including Ghana, were often unable to compete for projects in their own home markets. He called on donor countries to review the policy of tying bilateral assistance to the purchase of goods and services from their countries. Such bilateral arrangements he said negated the 2001 recommendations of the Development Assistance Committee of the OECD to untie all forms of aid.

The VRA Chief further called for a review of the high fixed costs of access — regulations and pre-qualification costs, high cost of tender information, the policy of 'bundling' contracts–which favours large firms — and financial constraints. He noted: "The exemption of foreign contractors in Africa from paying VAT and other taxes, and access to cheap financing from state-owned banks, should be scrapped in order to promote competition between

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2ND LOCAL CONTENT STAKEHOLDERS' FORUM IN PICTURES

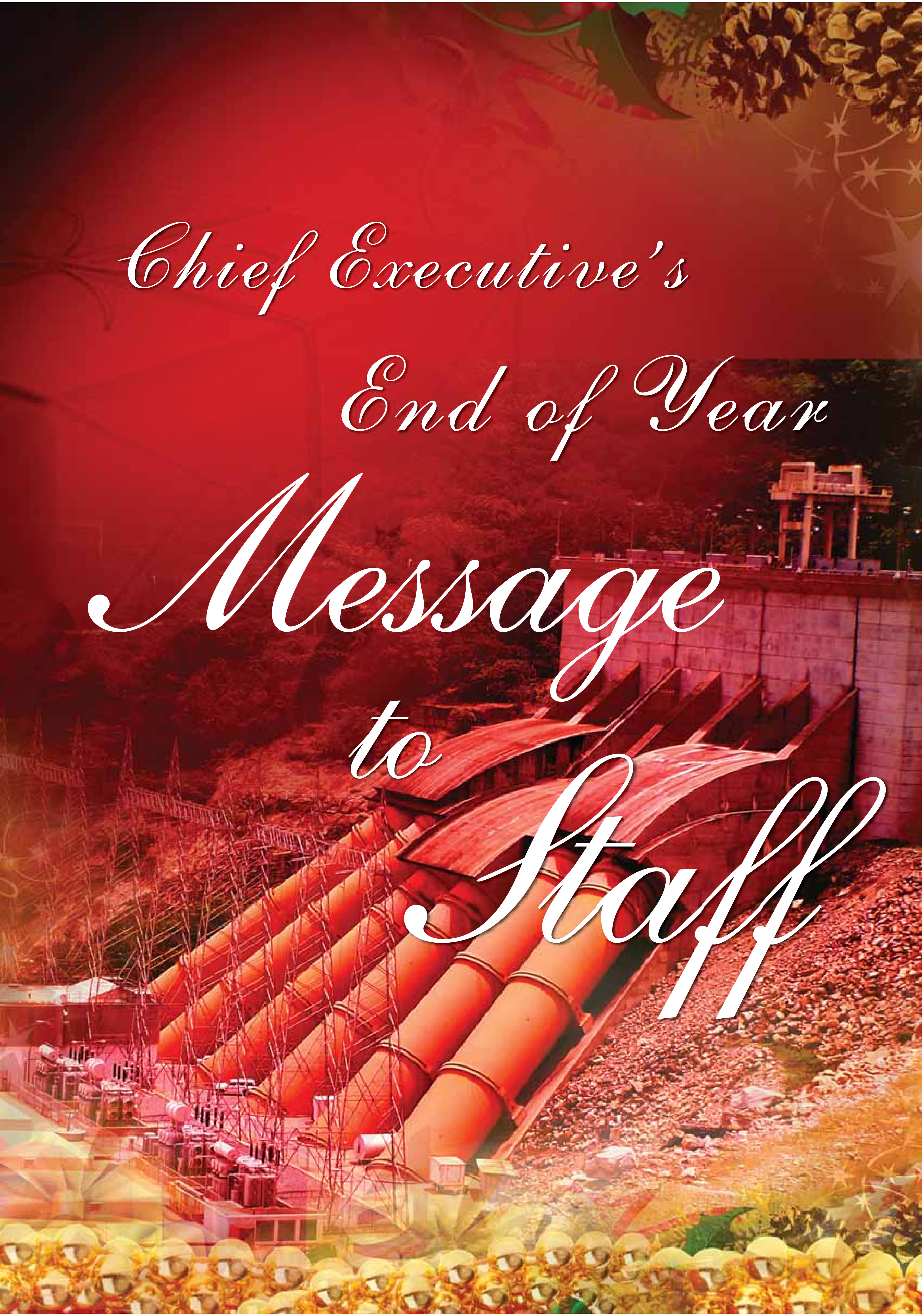
local and foreign enterprises. And he warned: "Unless these challenges are addressed satisfactorily, enterprises in Ghana and other developing countries will be at a disadvantage against international companies. The playing field needs to be tilted to favour the weaker side"

On his part, Mr. Charles Darku, Chief Executive Officer of the Ghana Grid Company (GRIDCo) said that in taking advantage of a local content policy, the level of Ghanaian ownership should be an important factor for the award of contracts. He suggested that domestic contractors should also demonstrate a beneficiary interest of more than 30%. He said that to support local content, GRIDCo would award contracts among ten local companies and develop them in the businesses of substation and transmission line works.

The Director of Customer Services of the Electricity Company of Ghana, Dr. N.K. Smart-Yeboah said the ECG had incorporated over 500 contractors and communities in its operations and would continue to build on that relationship. He said all ECG's procurements involving the World Bank and other bilateral sources had always lived by the application of the local preference margin as regulated by the Procurement Law to the local companies.

He expressed gratitude to the VRA for setting the benchmark, and providing an opening for all major organisations and institutions to fight for the success of a local content development policy through such fora.

Over 60 institutions and organisations participated in the forum.


Chief Executive's
End of Year
Message
to
Staff

Dear Colleagues,

This has been a difficult year for the Authority.

We started the year with gas volumes dropping 30% from previous year levels, causing intermittent load shedding, starting in the first quarter. In late August, just as gas volumes started to rise, the pipeline was damaged, severed in two by an errant anchor, and gas has not flowed since. The cessation of gas supply meant the immediate reduction in power supply of 200MW from the Sunon Asogli Power Plant, that can only run on gas. The resultant load shedding was very uncomfortable and unwelcome for the country as a whole and VRA in particular.

Fortunately, three important projects were already far advanced; the return of the Takoradi I 100 MW steam turbine; the commissioning of VRA's 132MW T3 project; as well as CENIT's 100MW Tema Plant which have combined to make up the initial deficit of power from the Asogli Plant. On the other hand, the Authority had to take on a much increased crude oil bill and, in the four months since the August pipeline damage, the Authority's crude oil bill increased over $250 million. This caused us great financial stress.

With the prospect of resumption of gas supply moved out to the end of the first quarter, VRA's financial challenges are not over yet. We hope that the new year will bring renewed support from the Government of Ghana to ensure that our financial challenges are well managed.

Beyond these challenges, the Authority notched some important achievements, which I will enumerate below:

Portfolio Growth:

In addition to the commissioning of the T3 project,

- *Re-start of the implementation of the 200MW Kpone Thermal Project in October;*
- *Construction of the first 2MW solar plant in West Africa which commenced in the second quarter and is scheduled to connect to the national grid early next year;*
- *Parliamentary approval obtained for the expansion of the Takoradi II "TICO" 220 MW project; and*
- *The commencement of feasibility study for the 49 MW Pwalugu dam project.*

Financial Strategy:

The Authority commenced its first hedging programme. We hedged 800,000 barrels of crude oil at strike prices ranging from US$90 to US$118, and registered overall mark to-market gains of over US$4 million. We were also able to roll key short-term receivables into a $150 million 3-year medium term facility that gave us much needed breathing

2012 — CE's End of Year

> ***"The project I am most pleased about, however, is the Build-the-Business program designed to re-engineer critical functions across the Authority that relate to finance, procurement, and planning, that migrates all our legacy software systems to an enterprise software platform, in this case, Oracle; and that has updated our current IT systems to state-of-the-art technologies."***

space to procure the additional requirements of crude oil in the last four months of the year.

Commercialisation of Non-Generation Functions:

NEDCo was officially launched in May; a new Board was sworn in and got immediately to work. NEDCo presented a 5-year business plan to donor agencies, and they have indicated initial support of NEDCo's 5-year plan. Discussions are on-going, and we are expectant that they will bear fruit, enabling NEDCo to achieve its long-term goal of financial sustainability.

In addition, business plans were completed for five(5) of the six(6) non-core areas; Akosombo Hotels Limited, Kpong Farms Limited, Schools, Health Services and Real Estates. Only VLTC's plan is outstanding. Board approvals were obtained to corporatise the current departments of schools and health services. In the real estate area, a holding company, Propco, is to be established, to house all of real estate's current activities and two new subsidiaries will be established: a property development company to develop the Authority's prime lands in Accra; and a golf estate company to build a world-class golf estate on the banks of the Volta just downstream of the Kpong dam.

Performance Strategy:

Balanced Scorecard:

2012 is the second year of the balanced scorecard. We deepened our understanding of the scorecard through extensive workshops for our directors, managers and key personnel.

This allowed us to refine and revise our corporate scorecard and develop closer alignment to departmental and individual objectives. We hope this deepening understanding and use of the balanced scorecard will pay hoped for dividends in the future.

This year, for the first time in the Authority's history, we also launched the VRA "Top 100", which gave directors and all our managers the opportunity to interact and discuss the key management challenges facing the Authority. The initial feedback from this event has been very positive, and we look forward to continuing engagement in the coming years.

r Message to Staff — 2012

"Late in the year, we launched the VRA Time Capsule, holding documents gathered from the first 50 years of VRA's history. My hope – and our goal – is that when that Time Capsule is opened in 2061, 48 years from now, our children and grandchildren will be justifiably proud of the work we did in 2012."

There are a number of other initiatives that have also been launched: the formation of the Projects & Systems Monitoring Department; the Corporate Communications Department, re-uniting external PR functions with internal communications. We have launched a new corporate website as well as an intranet.

The project I am most pleased about, however, is the Build-the-Business program designed to re-engineer critical functions across the Authority that relate to finance, procurement, and planning, that migrates all our legacy software systems to an enterprise software platform, in this case, Oracle; and that has updated our current IT systems to state-of-the-art technologies. January 7, 2013 is the "Go-Live" date for phase I of the project; and it is my expectation that our data capture and reporting will be much improved as a result. I wish to place on record my appreciation for the excellent work performed by the Build-the-Business team; they have made considerable progress despite the aggressive timelines; and we shall all be the beneficiaries of their good work starting next year.

Despite the enormous challenges, there remain enormous opportunities. VRA remains the largest producer of power in Ghana and the largest utility in West Africa. Initiatives we started in 2012, in respect of co-developing the first West African Power Pool (WAPP) regional generation project; in respect of identifying possible supply of gas from liquefied natural gas("LNG"), position the Authority for future on-going relevance as we look out over the next 50 years. Relevance in terms of supplying electricity to large sections of our population to raise their standard of living.

Late in the year, we launched the VRA Time Capsule, holding documents gathered from the first 50 years of VRA's history. My hope – and our goal – is that when that Time Capsule is opened in 2061, 48 years from now, our children and grandchildren will be justifiably proud of the work we did in 2012.

On that note, I wish you all a joyous Christmas season, and all the best wishes to you and your families in the New Year.

Kweku Andoh Awotwi
Chief Executive

Our Mission:
The **Volta River Authority exists** to **Power** economies & **Raise** the living standards of the peoples of **Ghana** & **West Africa**

OUR VALUES

- ***Commitment***
- ***Integrity***
- ***Trust***
- ***Teamwork***
- ***Accountability***

Did You Know that.....

VRA has donated assorted items to Pupuni L/A Primary and Junior High Schools

The Volta River Authority has donated 1,074 exercise books, four computers, 230 Pencils, 192 Pens and Three AIDS Games to the Pupuni L/A Primary and Junior High School at Akosombo as part of the Authority's Community Development Programme during their Silver Anniversary celebration.

Presenting the items, Mrs. Rhoda Arthur, Information/ Publicity Officer of VRA said, they would help facilitate teaching and learning and advised the students to prioritise education, because it was the key to development.

Mr. Prosper Yekple, Deputy Director, Ghana Education Service, Asuogyaman, who received the items on behalf of the school, expressed thanks to VRA for the kind gesture and support.

He said the items would go a long way to help in its academic performance in ICT, as the school previously had only two computers.

The Akosombo Volta River Authority Ladies Association (VRALA) also donated seven VRA @50-branded wall clocks and assorted drinks to the school.

Ms. Gifty Manu, President of the association, advised the students to be time conscious and take their studies seriously if they would become successful leaders.

Among the guests were the District Chief Executive for Asuogyaman, Mr Johnson Ehiakpor, and Mr Andrews Akriku of the VRA Real Estate and Security Services Department.

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IN THE NEXT ISSUE:

- CE's New Year Message
- Long Service Award
- End of Year Events

Please send your concerns, questions, congratulatory messages, issues, worries, suggestions, etc., to **PRunit@vra.com**

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