ANNUAL REPORT 2017

VOLTA RIVER AUTHORITY

Contents

OUR VALUE STATEMENT

OUR VISION

A Model of Excellence for Power Utilities in Africa

OUR MISSION

We exist to power economies and raise the living standards of the people of Ghana and West Africa. We supply electricity and related services in a reliable, safe and environmentally friendly manner to add economic, financial and social values to our customers and meet stakeholders' expectations.

ACCOUNTABILITY
I take responsibility for my actions

COMMITMENT
I strive for Excellence

TRUST
I am competent and have good character

INTEGRITY
I am always impartial, fair and honest

TEAMWORK
I strive for Excellence

VRA... We Add Value to Lives

THE VOLTA RIVER AUTHORITY BOARD

Board Members of the Volta River Authority as at December 31, 2017

Kweku Andoh-Awotwi
Executive/Chairman

Mr. Emmanuel Antwi-Darkwa
Chief Executive/Member

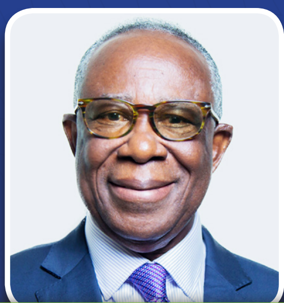
Nana Kobina Nketsia V
Traditional Ruler/Chieftaincy/Member

Chief Musa Badimsugru Adam Rtd.
Engineer/Management
Specialist/Member

Dr. Joyce Rosalind Aryee
Management & Communication
Consultant/Member

Mr. El-Farouk Umar
Financial Services/Technology/Member

Janet Anane (Mrs.)
Business woman/Member



Mr. Richard O. Okrah
Management Consultant/Member

Claudia Gyeke-Aboagye (Mrs.)
Board Secretary, VRA

EXECUTIVE AND MANAGEMENT STAFF AS AT DECEMBER 31, 2017

OFFICE OF THE CHIEF EXECUTIVE

POSITION	NAME
Chief Executive	Mr. Emmanuel Antwi-Darkwa
Director, Internal Audit	Mr. James J. Napour
Director, Corporate Strategy	Ing. Alfred D. Sackeyfio
Director, Planning & Power Business	Dr. Isaac Doku
Director, Office of the Chief Executive	Ing. Emmanuel D. Osafo
Board Secretary	Mrs. Claudia Gyeke-Aboagye

ENGINEERING & OPERATIONS BRANCH

POSITION	NAME
Deputy Chief Executive	Ing. Richard Nii Agyemfra Badger
Director, Hydro Generation	Charles H.B. des Bordes
Director, Thermal Generation (Eastern & Western Operational Areas)	Ing. Richard Oppong Mensah
Director, Engineering Services	Ing. Eugene Ada Asomontsi
Director, Environment & Sustainable Dev't.	Ing. Theophilus Nii Okai
Director, Technical Services	(Vacant)

FINANCE BRANCH

POSITION	NAME
Deputy Chief Executive	Alexandra Totoe (Ms.)
Director, Procurement	Mr. George Koaranteng
Director, Finance	Mr. Ebenezer Tagoe
Director, Management Information System	Ing. Kofi B. Ellis

SERVICE BRANCH

POSITION	NAME
Deputy Chief Executive	Mr. Richmond Evans-Appiah
Director, Legal Services	Ellen Bannerman-Quist (Mrs.)
Director, Real Estates & Security Services	Mr. William Bobie
Director, General Service	Shirely Seidu (Ms)
Director, Human Resources	Efua Garbrah-Sarfo (Mrs.)
Medical Director, VRA Health Services	Dr. Mrs. Rebecca Acquaah-Arhin
General Manager, VRA International Schools	Bevelyn Asamoah (Mrs.)
Ag. Chief Learning Officer, VRA Academy	Mr. Eric Mensah-Bonsu
Akosombo Local Authority	Mr. Edward K. Ofori

- Mrs. Harriet Wereko-Brobby is on secondment to the West African Gas Pipeline Project as General Manager, Corporate Affairs.

Dear Stakeholders,
I am pleased to have this opportunity to report on VRA's performance during the year 2017 and to share the achievements, key initiatives, and interventions we have undertaken to position VRA on the path of financial sustainability.

The year 2017 was challenging for the VRA. However, following Management's decision to operate our thermal facilities on cheaper natural gas, as against the use of light crude oil (LCO) and distillate fuel oils (DFO), and the intervention by Government through the issuance of the Energy Sector bond ("ESLA"), there has been a significant reduction in the Authority's financial burden. This has ensured the repayment of our debts, adherence to strict budgetary limits, and a gradual turnaround in our finances that has placed us firmly on the path to financial sustainability.

Operations Review

In 2017, a total of 9,577GWh of electricity representing 67% of the national total was generated at our facilities at Akosombo, Kpong, Tema, Aboadze and Navrongo. About 53% of the supply was provided from our hydro sources - Akosombo and Kpong Generating Stations with outputs of 4,282GWh and 752GWh, respectively.

Further, our total thermal generation was 2,404 GWh representing approximately 25% of the total supply. This was complemented by a total of 1,880.15GWh and 1,228.73GWh from TICO and AMERI.

We followed through our maintenance schedules to guarantee optimal operation of our plants. Specifically, the Akosombo and Kpong Generating Stations, as well as the Navrongo Solar Power Plant achieved 100% of planned maintenance. However, owing to unforeseen challenges, our thermal facilities in the eastern and western operational areas achieved maintenance targets of 99.5% and 94% respectively, while they both attained average plant availability of 85% and 97% respectively, during the period under review.

Management's decision to depend on gas for our thermal operations resulted in a 37% increase in the volume of gas usage from 24.8 million MMbtu in 2016 to 34 million MMbtu in 2017, which led to a significant drop in the use of LCO and DFO in 2017.

Going forward, our goal is to reduce operational costs through greater fuel efficiency and the reduction of our administrative costs. This should also help the Authority produce electricity at a competitive price.

Financial Health

The Group's revenue from the sale of electricity in 2017 increased by 1.47% (GH₵42.9 million) to GH₵2.965 Billion over the previous years' sales of GH₵2.922 Billion. This was largely due to a 2.0% increase in the average tariff of our mining customers from US cent 12.96/kwh in 2016 to US cent 13.22/kwh in 2017, offsetting a 4.2% (329 GWh) reduction in the overall volume of energy sold from 9,397GWh in 2016 to 9,005GWh in 2017.

The volume of electricity sold to regulated customers which attract relatively lower tariffs, decreased by 6% (455GWh) from 7,030GWh in 2016 to 6,575GWh in 2017; sales to deregulated customers increased by 1% (31GWh) from 2,367GWh in 2016 to 2,398GWh in 2017, resulting in the overall marginal increase in revenue. The average Bulk Generation tariff (BGT) of GHp 2.1 in 2016 was maintained for 2017 as well.

Financial Recovery Plan

Since 2012, VRA has encountered financial challenges that reached unsustainable levels in 2016. These challenges have been attributed to non-payment of accounts receivable, primarily, low asset utilization and high operating costs, among others. To address these challenges, the Board approved a 3-year Financial Recovery Plan (FRP), beginning 2018. The objective is for the Authority to achieve a sustainable level of profitability, and attain a composite financial performance that is comparable to industry standards.

The increasing competition presented by Independent Power Producers ("IPPs") coupled with reforms in the power sector underlie the facts that VRA's privileged monopoly position no longer exists, and its long-term relevance and viability is threatened if it does not adopt and implement a strategy to significantly turn around its financial position. The Financial Recovery Plan is expected to place the Authority on a firm financial footing and improve its ability to generate power on a sustainable and affordable basis.

Staff Matters

The industrial environment was reasonably stable during the period under review except for a brief period of tension amongst the staff of the VRA Schools at Akosombo. Relative calm was restored following Management's intervention. The VRA Board, which I have the privilege to chair, was appointed and inaugurated in October, 2017.

Portfolio Growth

While no new capacity was brought into service in 2017, a number of on-going projects are expected to add up to 170 MW in new capacity in the near future. These include construction of 12MW solar projects at Kaleo and Lawra, expected to be completed by 2019 and development of (2) 75MW wind projects in the southern parts of Ghana, expected to be completed in 2021.

STATEMENT FROM THE BOARD CHAIRMAN

Our Strategic Focus

Further to the Government of Ghana's (GoG) decision to restructure the VRA, the Board approved Management's program to facilitate the smooth transitioning of the organization into a Resilient, Sustainable Growing Multi-Business Holding Company, comprising Hydro, Thermal, Renewable and Non-Power Business Subsidiaries and affiliates.

The objective is to attract the private sector into the areas of thermal generation and the non-power, or non-core areas of the Authority's mandate. We shall leverage both our human and capital assets to this end, with the aim of complementing the private sector, who will bring capital, technology, and international best practice. The over-arching purpose is to make VRA's businesses commercially viable.

Challenges

The non-payment of the Authority's bills, primarily by fellow government-owned entities, and the resultant debt burden and limited liquidity that has resulted, has been the Authority's greatest challenge in recent years. Thankfully, Government's intervention through the issuance of the ESLA bond has been critical in nursing the Authority back to financial and operational health.

Operationally, the low utilization of our thermal facilities, especially in the Tema enclave, attributable to low gas supply, and the corresponding use of more expensive liquid fuels has also contributed to high operational costs. Going forward, the Authority plans to convert all our simple cycle plants into combined cycle mode to ensure we are able to utilize the gas, whether coming from Ghana or Nigeria.

Conclusion

VRA has over the past years established a firm foundation, and has generally executed its mandate well, in spite of the challenges and uncertainties it has confronted. The direction of the Board, and the dedication of Management and Staff have been vital to this enterprise. With good guidance and good governance, hard work and commitment we will continue to steer the affairs of this august organization, to ensure we secure our position as an industry leader in the years ahead.

Appreciation

On behalf of the Board, I wish to convey my gratitude to all our stakeholders for their continued support and sustained partnership towards the growth and development of the VRA. The VRA cannot succeed without the collective effort and commitment of all our key stakeholders. We look forward to working with you in the years ahead to realize a brighter future for the VRA, the power sector, and for Ghana as a whole.

Kweku Andoh Awotwi
BOARD CHAIRMAN

PROFILE OF THE VOLTA RIVER AUTHORITY

The Volta River Authority (VRA) was established on April 26, 1961 under the Volta River Development Act, Act 46 of the Republic of Ghana with the mandate to generate, transmit and distribute electricity. However, following the promulgation of a major amendment to the VRA Act in the context of the Ghana Government Power Sector Reforms in 2005, VRA's mandate has been largely restricted to the generation of electricity. The amendment has the key function of creating the enabling environment to attract Independent Power Producers (IPPs) onto the Ghana energy market.

Following the amendment, the transmission function has been hived off into an entity, designated Ghana Grid Company (GRIDCo) while VRA's distribution agency, the Northern Electricity Department (NED), has been transformed into the Northern Electricity Distribution Company (NEDCo), a wholly-owned subsidiary of VRA.

Power Activities

Strategically, the VRA has diversified its power generation development to take advantage of available and sustainable sources of energy, mainly, hydro, natural gas, liquefied petroleum products and renewables.

Accordingly, the Authority operates a total installed generation capacity of 2600MW, from the two hydroelectric plants, the Akosombo and Kpong Generating Stations with installed capacities of 1,020MW and 160MW respectively, complemented by several thermal facilities at Aboadze, including AMERI, Tema and Kpone totaling 1,417.5MW, and a 2.5MW solar PV plant at Navrongo.

Capacity Expansion Programme

As part of efforts to diversify and expand energy generation infrastructure, VRA continues to identify and pursue the development of new projects and or expanding exisiting infrastructure. The objective is to increase generation capacity and contribute to reducing emissions that cause global climate change through the development of cleaner energy.

Renewable Energy Development

In line with Government of Ghana's policy on renewable energy development, the VRA Board approved a renewable energy programme which seeks to set 5-10 years renewable energy capacity targets. Successful attainment of these renewable projects will contribute to improving VRA's carbon footprints which will impact positively on the global climate change and sustainable power generation.

Northern Electricity Distribution Company Ltd.

The Northern Electricity Distribution Company (NEDCo), a subsidiary of the VRA, is the sole distributor of electricity in the Brong-Ahafo, Upper East, Northern, Upper West, and parts of Volta and Ashanti regions of Ghana. NEDCo, originally developed as an integral part of the larger Northern Electrification and System Reinforcement Project (NESRP) to extend the national electricity grid to northern Ghana, has a customer population of 823,244 and a load demand of about 240.3MW (non-coincident).

PROFILE OF THE VOLTA RIVER AUTHORITY

Customers and Power Interconnectivity

The Electricity Company of Ghana (ECG) and the Northern Electricity Distribution Company (NEDCo), a subsidiary of VRA are the two major bulk customers of the VRA. Power sold to the two entities cater mainly for domestic, industrial and commercial concerns in the southern and northern parts of the country respectively. Bulk sales are also made to several mining companies and industries across the country including; AngloGold Ashanti, Newmont Ghana Gold Ltd., Golden Resources Group, Diamond Cement Ghana Ltd., Aluworks, and Akosombo Textiles Ltd.

Sub-Regional Cooperation

VRA reaches its customers in Ghana and neighbouring countries through GRIDCo's transmission system, which covers the entire country and links up with the national electricity grids of Cote d'lvoire, Compagnie Ivoirienne d'Electricité (CIE), Togo, Communauté Electrique du Benin (CEB) and Société Nationale d'électricité du Burkina Faso (SONABEL).

VRA is a foundation customer in the development of the West African Gas Pipeline (WAGP) which guarantees our competitiveness in power delivery in the sub region. Additionally, VRA is a founding/ principal member of the Association of Power Utilities of Africa (APUA), contributing significantly to policies on power development and accessibility on the African continent. APUA is a permanent member of the Executive Council of the African Energy Commission and a preferred partner of the New Partnership for Africa's Development (NEPAD).

Relations with Statutory Bodies

In fulfillment of the Authority's mandate, the Authority has working relations with the following statutory bodies: Public Utilities Regulatory Commission (PURC) and the Energy Commission (EC) as regulators with the Ministry of Power (MoP) as the supervising body.

Non-Power Activities

In accordance with the Executive Instrument (EI) 42, 1989, VRA administers and exercises Local Authority functions in the Akosombo Township by enforcing Local Authority enactments, resolutions and bye laws.

Furthermore, VRA continues to run its first and second cycle schools as well as provides the health needs of staff, their dependents and the communities within its operational areas in Accra, Akosombo, Akuse and Aboadze. VRA also maintains a dredging programme at the estuary of the Volta River at Ada to reduce the incidence of bilharzia and to restore the ecosystem of the area, as well as an afforestation programme targeted at reducing siltation of the Volta Lake through the restoration of permanent vegetative cover on the slopes bordering the lake.

COMMUNITY AND SUSTAINABLE DEVELOPMENT

The Volta River Authority demonstrates its social responsiveness through interventions designed to enhance the socio-economic and physical environment of the lakeside and downstream communities. These are executed through the VRA Resettlement Trust Fund, set up in 1995, to support development initiatives in the 52-settlement townships around the Volta Lake. To further facilitate VRA's CSR activities, the Community Relations Unit (CRU) was established in 2003 with the mandate to strengthen engagements with the communities affected by our operations but not captured under the Trust Fund.

Continued

PROFILE OF THE VOLTA RIVER AUTHORITY

In furtherance, the Community Development Programme (CDP) was developed in 2012 to promote the empowerment of the communities and stimulate economic development. The CDP focuses on 6 thematic areas: environmental sustainability, social infrastructure projects, education, health and support for cultural activities with the goal of capturing the expectations of the communities and maintaining the Authority's policy of partnership with the communities and District Assemblies.

United Nations Global Compact

As evidence of its commitment to international sustainability reporting, promoting responsible corporate citizenship and support towards attaining a more sustainable and inclusive global economy, VRA in 2003 signed onto the United Nations Global Compact with the objective of bringing into line its strategies and operations with universal principles on human rights, labour, environment, anti-corruption as well as take actions that advance societal goals.

SUBSIDIARY COMPANIES

In fulfillment of its responsibility in the development of the Volta Basin, VRA operates three subsidiary companies; Akosombo Hotels Limited, Kpong Farms Limited and the Volta Lake Transport Company Limited.

Volta Lake Transport Company Ltd.

The Volta Lake Transport Company Limited (VLTC), incorporated in 1970, operates river transportation for passengers, bulk haulage of petroleum products and significant quantities of cement, and cross-lake ferry services along the Volta Lake.

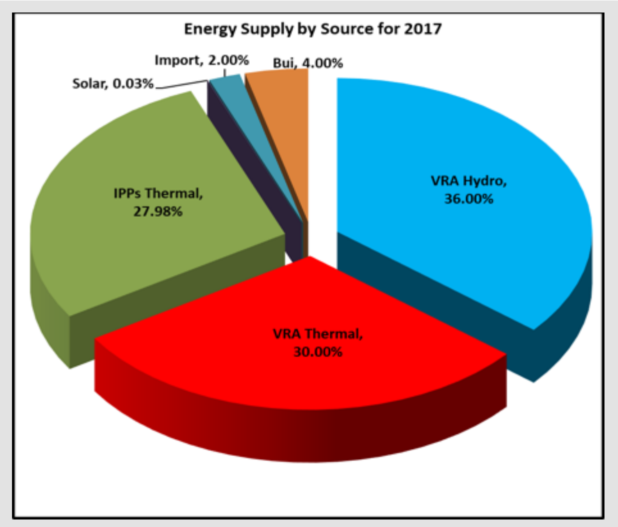
Kpong Farms Ltd.

Kpong Farms Limited (KFL) was incorporated in May 1982 by the VRA as a wholly-owned agricultural commercial venture, to carry out mechanized commercial farming, agro-processing, and provision of machinery services. KFL was established to harness the water resources of the Volta Lake at Kpong for the use of viable agricultural ventures and for the Farm to serve as a demonstration project in a modern agricultural system. The Kpong Farms over the years has evolved into a commercial venture with the potential for expansion with private sector participation.

Akosombo Hotels Ltd.

The Akosombo Hotels Limited (Volta Hotel), incorporated in 1991, runs a 3-star hotel, restaurant and modern conference/seminar facilities and pleasure activities including cruising on the lake by MV Dodi Princess to promote tourism.

OPERATIONS REVIEW



Electricity Demand and Supply

The Ghana power system recorded a peak demand of 2,192.15MW on November 13, 2017. This is higher than the peak demand of 2,087MW recorded in 2016, by about 5 percent.

Due to the availability of excess capacity during the period under review, no load relief was obtained from the Electricity Company of Ghana (ECG), Northern Electricity Distribution Company (NEDCo), Volta Aluminum Company and other key customers as had been the case in previous years.

A total of 9,577GWh of electricity, representing 67%, was generated at our generating plants at Akosombo, Kpong, Tema, Aboadze and Navrongo in 2017. This is a decrease of 0.7 percent over the 9,387.67GWh generated in 2016. About 36% of the total system energy generated i.e. 5,034GWh was supplied from VRA hydro sources, with Akosombo Generating Station producing 4,282GWh while 752GWh was generated at the Kpong Generating Station.

Total VRA thermal generation including imports of 256GWh was 4,541GWh which is about 32% of the total system supply. Specifically, Takoradi Thermal Power Station (TTPS) including TICO and AMERI generated 3,794GWh with Tema Thermal Power Complex (TTPC) generating 490GWh. A total of 1,880GWh was produced from TICO and 1,229GWh was also supplied by AMERI to supplement generation from VRA's own facilities.

Operational Maintenance

To ensure reliability and asset value maximization, VRA followed through all its maintenance schedules on the generation facilities to guarantee the optimal operations of the plants. The Akosombo and Kpong Generating Stations as well as the Navrongo Solar Power Plant (NSPP) achieved 100 percent of planned unit maintenance. Maintenance of Auxiliary Equipment in both Hydro plants, as well as Outside Services maintenance activities in the Akosombo and Akuse townships, were fully accomplished for the year.

The maintenance accomplishment for Thermal Generation, Western Operational Area (TGWOA) was 94%. The Area's inability to achieve 100% was due to the unavailability of spare parts to carry out some corrective maintenance works. The Eastern Operational Area (TGEOA) on the other hand, achieved a maintenance accomplishment of 99.50%.

Plant availability and forced outage factor analysis

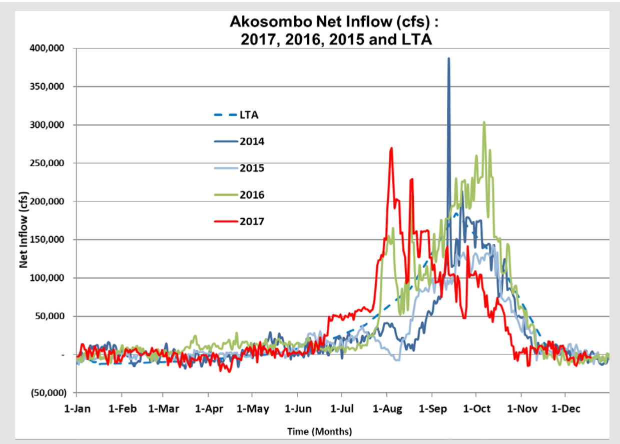
During the year, plant availability and forced outage factor for Akosombo GS, were 94.28 percent and 0.0013 percentage respectively while the Kpong GS attained 72.52 percent and 0.4832 respectively. The two hydro plants thus achieved a consolidated availability targets of 90 percent and a consolidated forced outage of 0.067 percent, which is within the target of one (1) percent and well within the Electricity Utility Cost Group (EUCG) Industrial average of 4.25 percent. The above was attained following good maintenance practices and prompt responses to situations at the plants.

TGWOA ended the year with a Plant Availability of 36.0 percent. Reasons for the low performance include; shutdown of Gas Turbine Unit #2 (GT2) from January 9, 2017 for Major Inspection and a forced outage on Gas Turbine Unit #1 (GT1) for the first four months of 2017, to repair generator rotor and carry out Hot Gas Path Inspection. GT1 & GT2 operated mainly on natural gas at an average load of 101.2MW and 99.6MW respectively. The Steam Turbine Unit operated mostly with HRSG1 at an average load of 45.5MW.

TGEOA on the other hand achieved an overall average availability factor of 87.68 percent compared to the set target of 90 percent. Specifically, the Tema Thermal Complex (TTPC) performed at an average availability and year-to-date capacity utilization of 96.96 and 38 percent respectively. In addition, the less frequent running regime at the plant ensured that a minimal forced outage rate of 3.1 percent was recorded during the period. During the same period, the Kpone Thermal Power Station (KTPS) secured an average availability rate of 78.4 percent and a year-to-date capacity utilization of 6.6 percent, compared to the planned targets of 90 and 38 percent respectively.

Hydrology Report

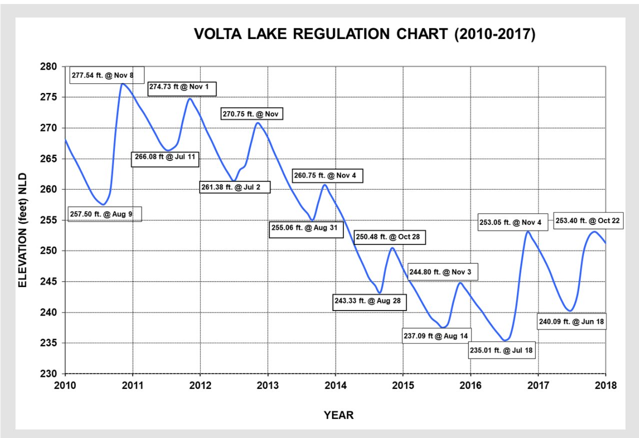
The year begun with a reservoir level of 76.34m (250.47ft) and ended with a level of 76.61m (251.34ft), recording a rise in lake level of 0.27m (0.87ft). The year saw the lowest water level of 240.09ft recorded on June 19, 2017. At the end of the inflow season, a maximum water level of 253.40ft was recorded on October 22, 2017.



Hydrograph Pattern

The inflow season (June-November) in 2017, was characterized by average performances of weather indicators such as Inter Tropical Boundary (ITB) position (which determines the region of concentration of rainfall), moisture depth and atmospheric pressure levels in the sub region. This led to average rainfall activities over the Lower Volta Basin, which resulted in average inflow into the Volta Lake.

Though the rainfall activities over the Upper Volta Basin was above average, rainfall activities within the southern part of the basin was below average for 2017. This led to below average rainfall activities in Ghana for the 2017 rainfall season. The annual rainfall for the seven selected rainfall stations of interest to VRA for 2017 was 1,111mm. This was lower than the long-term average (LTA) by 7%. It is however higher than the annual rainfall for 2015 by 20.9 percent.

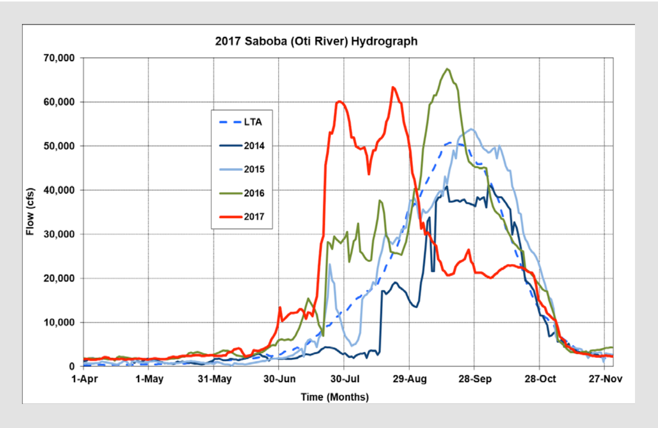


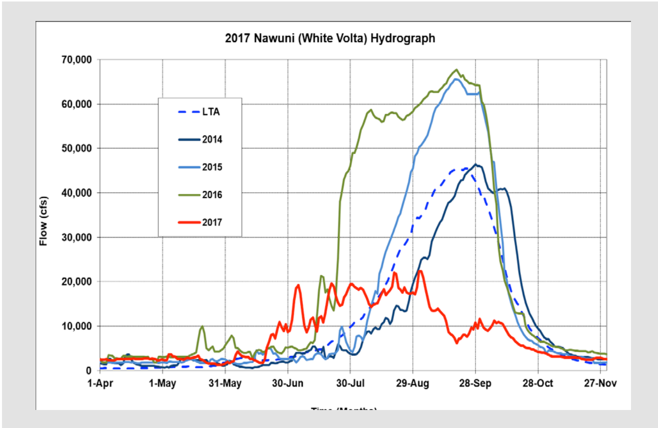
Volta Lake Regulation

The Volta Lake was regulated between elevations 76.34m (250.47ft.) at the beginning of the year and 73.18m (240.09ft), the minimum Lake elevation at the end of the dry season. This represents a drop of 3.16m (10.38ft) from the beginning of the year to the end of the depletion season. The lowest elevation was recorded on June 18, 2017. The Lake attained a maximum elevation of 77.13m (253.05ft.) on October 22, 2017, giving a total rise of 4.06m (13.31ft.). The Volta Lake elevation at the end of the year was 76.61m (251.34ft.).

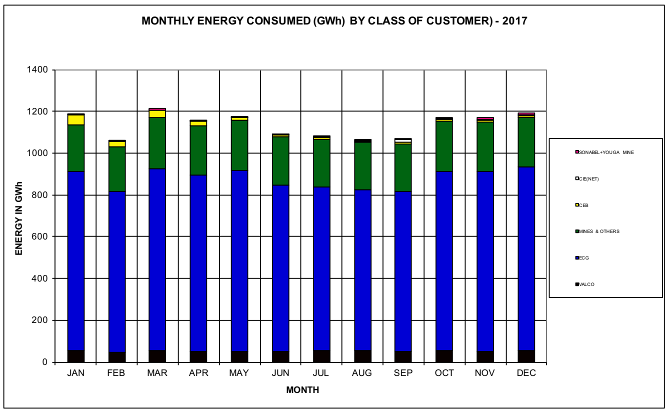
Tributary Flows

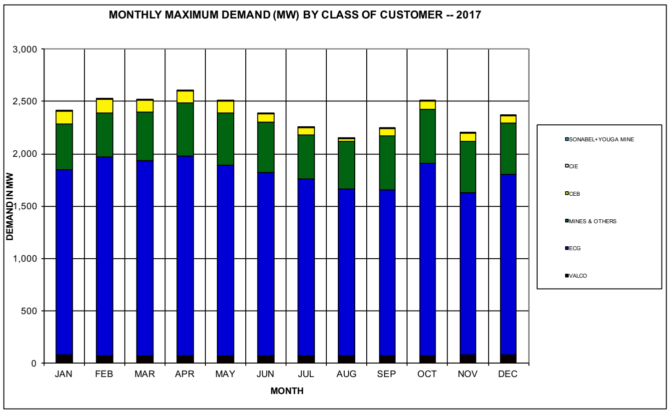
Stream flow data from the gauging stations on the three major tributaries of the Volta Lake namely: Nawuni on the White Volta River, Bui on the Black Volta River, and Saboba on the Oti River were as follows; the Oti River recorded 8.53 MAF. This was higher than the LTA for the Oti River by 27%. The inflow recorded on the White Volta was 3.88 MAF. This was 32 percent lower than the LTA for the White Volta at Nawuni. The Black Volta recorded an inflow of 5.88 MAF. This however, was not compared to the long term average.



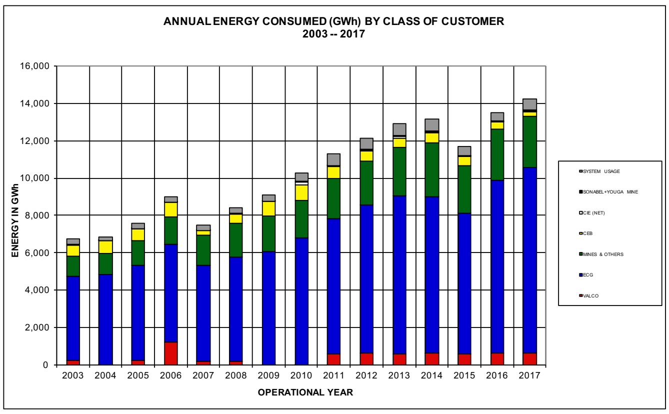


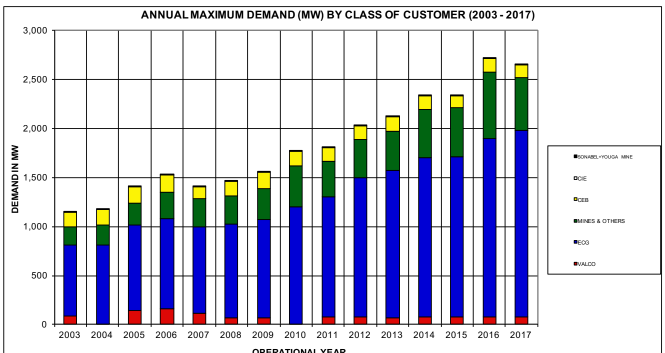
MONTHLY ENERGY DEMAND AND CONSUMED BY CLASS OF CUSTOMERS





ANNUAL ENERGY DEMAND AND CONSUMED BY CLASS OF CUSTOMERS





1. The reduction in 1999 demand was due to domestic load curtailement. Also there was load curtailment in 2006 and 2007
2. The maximum demand for 2002 is higher than that of 2003 because valco's load was curtailed.
3. Supply to SONEBEL (border towns Po and Leo) commenced in 2003 but is insignificant and therefore not visible on the chart. Supply to Sonabel from 2009 includes Youga Mine

Kpong Generating Station Retrofit

Retrofitting of the second unit (Unit 1) continued during the year under review. Refurbishment and assembling works on the generator, turbine, gates, electrical protection and automation systems were successfully completed. Commissioning activities on the Unit commenced in December 2017 and expected to be completed by February 2018. Overall completion is expected in March 2020. The retrofit which is being undertaken by Andritz Hydro with Hatch Limited as VRA's consultants is aimed at modernizing the facility and extending the life of the plant for the next 30 years.

Capacity Expansion Activities

Plans to convert the Tema TT1PP/TCTPP plants into combined cycle via a joint venture between VRA and CENIT Power progressed with the appointment of Price Waterhouse Coopers as the Transaction Advisor. The process however has stalled following Government of Ghana's (GoG's) new approach for developing the project.

Additionally, plans to repower the 132MW (T3) Plant, develop the proposed 186MW (T4) Plant both at Aboadze, and convert the KTPP Phase 1-Stage 2 into a combined cycle mode, remained in the front burner of the Authority's infrastructure expansion initiatives.

Renewable Energy Initiatives

VRA pursued implementation of its renewable energy initiatives with a sense of commitment, by striving to ensure the development of its related infrastructure. The objective is to facilitate the long term desire of addressing issues relating to high energy prices, energy security and system reliability.

• Wind Power Projects

VRA pursued development of its two 75MW Wind Power Projects being undertaken by Vestas and El Sewedy. The final draft reports on the Environmental Social Impact Assessment (ESIA) for the two projects were submitted by Selijen Consult, upon completion of the feasibility studies by VRA's Owner Engineer, Lahmeyer International (LI). Provisional license for wind power projects 1 & 2 have been obtained from the Energy Commission and development activities are being made to obtain siting permits for the projects.

• Solar power Projects

With solar energy, arrangements to kick start the expansion of the initial 2.5MW solar power plant at Navrongo by 5MW was initiated alongside the two proposed projects at Kaleo and Lawra in the Upper West region which would generate about 12MW. Additionally, VRA is considering the construction of a 20MW solar power plant to be sited at Bongo in the Upper East region. If successfully implemented, the capacity added would significantly contribute to VRA achieving its renewable energy capacity targets as approved by the Board.

It is also instructive to state that, following Management's decision to convert the VRA Townships and Office buildings to Green Communities through the development of a Roof Top Solar PV at Akuse and Akosombo, VRA undertook a site visit to the premises of a Floating Solar Developer, an operating Floating Solar Plant and a Floater manufacturer to acquaint itself with the technology. This new focus aims at projecting our new culture of working in a green and smart environment.

Coal-Fired Power Plant

As part of efforts to diversify the Authority's generation portfolio and expand capacity, VRA is collaborating with Shenzhen Energy Corporation, China, for the development of a 2x350MW Supercritical technology coal-fired facility at Aboano in the Ekumfi District of the Central Region. Project consultants, Shandong Electric Power Engineering Consulting Institute and CCCC -FHDI Engineering Company from China have completed feasibility studies for the project. The Draft Final ESIA Report was submitted to the EPA for review in July 2017. A public hearing on the national level has been requested by the EPA due to the interest shown by stakeholders.

Nuclear Power Programme

The Government of Ghana has considered adding Nuclear Power to the country's energy mix as indicated by the introduction of Nuclear Energy in the country's national energy policy plan in 2010. In view of this, VRA, as a potential owner/operator of Ghana's first nuclear power plant participated in activities relating to the Nuclear Power Programme including the Integrated Nuclear Infrastructure Review (INIR) mission conducted by the IAEA in January 2017, and the Site and External Events Design (SEED) expert mission, from November 29-30, 2017.

OPERATIONS REVIEW

POWER BUSINESS

Power Sales

Power sold to customers in 2017 was 9,519GWh. This was 3.54% lower than the 2016 figure of 9,868GWh. The total power sale in 2017 comprised 6,645GWh to electricity distribution companies, 307GWh to export customers, 1,966GWh to bulk customers and 601GWh to GRIDCo as transmission losses and substation use.

Out of the power sold to the distribution companies, 5,252GWh was to Electricity Company of Ghana (ECG), 1,236GWh to Northern Electricity Distribution Company (NEDCo) and 157GWh to Enclave Power Company (EPC).

For export customers, the Authority sold 214GWh, 57GWh and 36GWh to Communauté Electrique du Bénin (CEB), Société Nationale d'électricité du Burkina (SONABEL) and Compagnie Ivoirienne d'Electricite (CIE) respectively.

Power sold to bulk customers consisted of 1,151GWh to mining companies and 815GWh to industrial/commercial customers. The mining companies included AngloGold Ashanti (AAGL), Newmont Ghana Gold Ltd (NGGL), Newmont Golden Ridge Ltd (NGRL), Goldfields Ghana Ltd (GFGL), Golden Star Resources Group, Perseus Mining Ghana Ltd (PMGL), Adamus Resources Ltd, Owere Mines, Prestea Sankofa Gold Ltd (PSGL), Adansi Gold Ltd and Great Consolidated Diamonds Ghana Ltd. The industrial/commercial customers also included Aluworks Ghana Ltd, Akosombo Textile Ltd, Diamond Cement Ghana Ltd, Savanna Diamond Company Ltd, VALCO, and others.

During the period under review, the Authority signed on one new customer, BlackIvy, and executed a Power Sale and Purchase Agreement in December 2017 with New Century Mines.

Tariffs

Electricity tariffs for bulk and export customers were adjusted quarterly based on the terms and conditions of the respective Power Sale and Purchase Agreements. The Public Utilities Regulatory Commission (PURC) approved a VRA Bulk Generation Charge (BGC) of GHp21.08/kWh effective July 1, 2016. However, the PURC did not adjust the VRA BGC of GHp21.08/kWh during the year under review.

Sale Contracts

In 2017, VRA continued with its efforts at reviewing and executing Power Sale and Purchase Agreements (PSPAs) with its customers. In furtherance of this, by the end of 2017, VRA had concluded and executed nineteen (19) PSPAs.

Gas Supply

To ensure we have sustained gas supply for the operations of our thermal assets, VRA continued to engage and manage natural gas supplies from our existing principal gas suppliers namely N-Gas Limited of Nigeria and Ghana National Gas Company (GNGC) Limited.

VRA took a critical step towards continued supply of gas from Nigeria through the establishment of a Stand-by Letter of Credit (SBLC) in mid-year, as a payment security for approximately 60,000MMBtu/d of gas from Nigeria. Following the issuance of the Energy Sector Bond, VRA continued to work closely with the Ministries of Finance and Energy as well as ESLA PLC to facilitate the payment of a share of the legacy debts owed N-Gas and other fuel suppliers.

Notwithstanding the challenges of the turret on the Jubilee FPSO which was yet to be rectified by end of the year, VRA continued to receive fairly stable, adequate and consistent gas supplies from the Jubilee Fields via the GNGC Facilities.

The pursuit of LNG as fuel option for VRA however stalled in the year under review following the assumption of office of the new Government. It is our understanding that, the Quantum Tema LNG Project was cancelled while the Emergency LNG Project by West Africa Gas Limited (WAGL) was to be re-negotiated between GNPC and WAGL and thus deferred.

Financial Health

The Group's Revenue from sale of electricity in 2017 increased by 1.47% (GH₵42.87 million) to GH₵2,964.97 million over the previous year's sales of GH₵2,922.09 million. This was mainly due to the combined effects of a 4.18% (329GWh) reduction in the volume of energy sold from 9,397GWh in 2016 to 9,005 GWh in 2017 and a 2.03% increase in the average tariff of deregulated mines from US$0.129625/kwh in 2016 to US$0.132250/kwh in 2017.

Additionally, the volume of electricity sold to regulated customers which attract relatively lower tariff decreased by 6% (455GWh) from 7,030GWh in 2016 to 6,575GWh in 2017 whiles the sales to deregulated Customers increased by 1% (31GWh) from 2,367GWh in 2016 to 2,398GWh in 2017 resulting in the overall marginal increase in the revenue. The average Bulk Generation tariff (BGT) of GH₵0.210808 in 2016 was maintained for 2017 as well. A 11.26% depreciation of the average GH₵/US$ exchange rate from GH₵3.9103/US$1 in 2016 to GH₵4.3504/US$1 in 2017 also contributed to the increase in sales revenue.

Corporate Reputation Management

In 2017, the VRA undertook a number of public relations and other collaborative engagements aimed at restoring the Authority's corporate image after the energy crisis of 2014-2016. Significant among them were media and community engagements, as well as execution of the Authority's Corporate Social Reponsibility programmes. The outcome was a reduction in the negative reportage on the Authority from 20% in 2016 to 6% in 2017.

Staff Matters

The industrial environment was reasonably stable during the period under review except for a brief period of tension amongst the staff of the VRA Schools at Akosombo during the third quarter. Calm however was restored following Management's intervention. To improve employee-employer relations, HR Fairs were organised in all the work locations to bring HR services and products closer to the staff. A nine-member Board for the Authority was also appointed and inaugurated during the fourth quarter.

Environment & Sustainable Development

Further to Management's decision to enagage the private sector in the management of aquatic weed harvesting and sand dredging services in the Lower Volta area from Akuse to the estuary at Ada, the area to be dredged was demarcated into (5) five lots. Following an international competitive bidding process, EKO-H Mediterranean Ltd. was selected to undertake dredging services in Lots 1, 2, and 3.

Further to that, Executive approval was received to invite Lower Volta Dredging Consortium for contract negotiation for the dredging of Lots 4 & 5. EKO-H is in the process of acquiring the relevant statutory permits to enable the contract to be executed. The successful dredging of the Lower Volta Area is critical to the management of the environmental impacts arising from the operations of the two hydro dams, as it would positively impact on the general livelihood and welfare of the communities downstream in the Lower Volta.

In addition, VRA initiated a possible collaboration with the Bamboo & Rattan Development Programme (BARADEP) of the Forestry Commission. The purpose is to identify the possibility of using bamboos as vegetative cover to protect the Volta Lake as well as use it as an additional source of alternative livelihood venture.

Real Estates

The Akosombo Management Committee (AMC) on behalf of the VRA continued to manage the Akosombo Township as a Local Authority in accordance with El 42 of May 1989. Total revenue the AMC generated from its local council activities amounted to GH₵0.141 million.

This Local Authority receipts would be shared equally between the Authority and the Asuogyaman District Assembly in accordance with the existing agreement.

Total income accrued for Non-Local Authority activities in the year 2017 amounted to GH₵13.403 million. Income from rent in 2017 witnessed a massive growth from GH₵1,445 million in 2016 compared to GH₵2,289 million, a percentage growth of 58.4 percent. Included in the total revenue under property services is income from catering services and accommodation which amounted to GH₵4.276 million. This represents a decrease of about 1.8 percent over the 2016 total revenue of GH₵4.352 million. The overall total revenue generated by the Department during the period under review totaled GH₵13.544 million.

VRA Hospitals Ltd.

The Akosombo, Aboadze and Accra Hospitals as well as the Akuse Clinic continued to provide satisfactory medical care for staff and dependants as well as the general public. Additionally, VRA's designated panel of doctors catered for staff and their dependants at Northern Electricity Company (NEDCO) and all the VRA Substations. In addition to general medicine, specialised services were provided in general surgery, obstetrics & gynaecology, ophthalmology, orthopedics, ear, nose and throat, physiotherapy and dental care at Akosombo and Accra offices. Other cases were referred to selected hospitals including; Korle Bu Teaching Hospital, 37 Military Hospital and St. Joseph's Hospital at Koforidua.

Total Outpatient attendance at the Authority's facilities was 195,122 which is 1.8 percent higher than last year's figure of 191,659. Total admissions in 2017 decreased from 6,172 to 5,754, representing a drop of 6.8 percent. The paying public population constituted about 66.96 percent of the overall out-patient load and 94.09 percent for the in-patient load in all medical facilities. Over 80 percent of these figures were National Health Insurance clients.

Some major milestone during the year include the commencement of operations of the Hospital's Incinerator after its commissioning. Furthermore, work on the Eye clinic at the medical enclave progressed steadily.

NON-POWER ACTIVITIES

Strategic Business Units

The non-power departments within the Authority are the Real Estates, VRA Schools, and VRA Hospitals. Although registered as Companies, they are yet to operate fully as Strategic Business Units (SBUs) and are implementing strategies that will gradually transit them into Subsidiaries. New Boards are being constituted to direct the transition process. A company registered as VRA Property Holding Company has begun its transition as a Subsidiary Company focusing on new property developments. It is to take over the Real Estates Department as soon as its restructuring is over.

Subsidiaries

VRA has a strategy to support its investment portfolio guided by the National Public Private Partnership (PPP) Policy where applicable. VRA is currently seeking private investor participation to recapitalise the companies, expand and refurbish their facilities and position them to compete favourably within their markets.

Kpong Farms Limited (KFL)

The strategic direction of VRA for the Kpong Farms Limited is to engage private investors to revive commercial operations on the Farms. This would be a Lease cum Development arrangement, in accordance with the PPP Process. The Farms however, is currently cultivating rice on a small scale just to secure and add value to the property.

Volta Lake Transport Company (VLTC)

VLTC has the potential to expand its markets and business opportunities by increasing productivity in port and transit services. This requires improvements in its transport infrastructure, equipment and vessels. The company, in consultation with the Ministry of Transport is seeking private partnerships to develop its infrastructure, add on to its fleet of vessels and barges, and operate an efficient transport service.

Akosombo Hotels Ltd (Volta Hotel)

The Akosombo Hotels Limited runs a three-star hotel, restaurant, modern conference and seminar facilities, a gym, spa and other pleasure activities as well as the new MV Dodi Princess II which is expected to commence operations in 2018. The hotel has plans to restructure and expand its total capacity to about one hundred and twenty (120) rooms with the support of strategic investors, and offer excellent service in a luxurious ambiance within a highly competitive hospitality industry.

CORPORATE SOCIAL RESPONSIBILITY

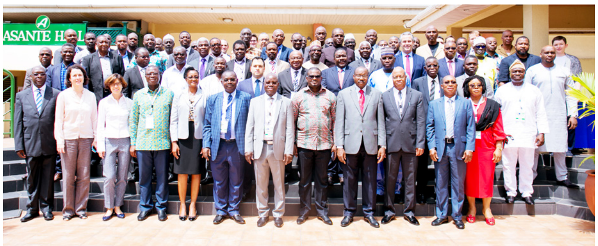
VRA's business is not all about power generation. At the heart of what it does, is it's people. VRA demonstrated this obligation through various interventions designed to enhance the socio-economic and physical environment of the lakeside and downstream communities.

During the period under review, an amount of Two Million and Fifty-Two Thousand Eight Hundred and Thirty-Six Thousand Cedis and Ten Pesewas (GH₵2,052,836.10) was expended on key activities/interventions under the Environmental Management Plan (EMP) for the operation of the Akosombo & Kpong Hydro Electric Power Plants. These included the implementation of the Authority's Community Development Programme, Corporate Social Responsibility activities, Bilharzia Control Programme, Integrated Aquatic Weed Control and Watershed Management. The activities were aimed at mitigating the impacts arising from the existence and operations of the Authority's dams, as well as improving the overall wellbeing and livelihoods of the indigenes in the impacted communities.

Furthermore, as part of VRA's Corporate Social Responsibility and our quest to reduce the incidence of Bilharzia in the endemic communities, VRA in partnership with Binatone's Project Maji, successfully completed and commissioned a solar powered borehole for the Sedorm Community. Additionally, two sessions of the VRA Employee Volunteer Programme for Senior High Schools (SHS) was undertaken at the Shama and Apegusu SHS. The objective is to inspire students to aim high in their career pursuit and also to promote volunteerism among the staff of VRA to give back to society.

Finally, VRA made charitable donations to various institutions including the Ghana Institute of Engineering, Centre for Excellence Awards and the Ghana Heart Foundation.

Strengthening Partnerships and Sustaining Relationships.



FINANCIAL REVIEW FOR THE YEAR ENDED DECEMBER 31, 2017

The financial review relates to the Group, unless stated otherwise.

Power Production

The total electricity generated from both hydro and thermal sources decreased by 20GWh (0.2%) from 7,458GWh in 2016 to 7,438GWh in 2017; this includes generation and transmission substations use of 74GWh (2016: 48GWh). Generation from hydro sources increased by 417GWh (9%) from 4,617GWh in 2016 to 5,034GWh in 2017. Thermal generation however declined by 15% (437GWh) from 2,841GWh in 2016 to 2,404GWh in 2017. The Thermal generation includes 1,299GWh of energy from the Ameri Plant (2016 : 1,233GWh). VRA's 3GWh generation from solar plants remained unchanged from 2016 figure.

To supplement generation from VRA's own plants, gross power of 2,136GWh (2016; 2,486GWh) was purchased from Compagnie Ivoirienne d' Electricite (CIE) of Cote d' Ivoire and Takoradi International Company Limited (TICO) of Ghana, representing a decline of 14% (350GWh) from the 2016 power purchase from TICO and CIE.

Summary of energy generated and purchased in 2017

	Change		2017		2016	
	GWh	%	GWh	%	GWh	%
VRA Hydro:						
Akosombo	428	11%	4,282	42%	3,854	39
Akuse	(11)	(1)	752	7%	763	8
	417	10%	5,034	49%	4,617	47
VRA Thermal:						
TTPS	(518)	-43%	686	7%	1,204	12
TTIPP	187	-105%	365	4%	178	2
TT2PP	(25)	-98%	-	0%	25	0
T3	-	0%	-	0%	-	0
MRPP	(3)	-100%	-	0%	3	0
KTPS	(74)	280%	124	7%	198	2
AMERI	(4)	-	1,229	12%	1,233	12
	(437)	-15%	2,404	30%	2,841	28
Total VRA Hydro & Thermal	(20)	0%	7,438	79%	7,458	75
VRA Solar:						
NSPS	0	-11%	3	0%	3	0
	0	-11%	3	0%	3	0
Total Energy by VRA	(20)		7,441		7,461	75
Purchases & Imports						
TICO	(46)	-2%	1880	18%	1,926	19
CIE	(304)	-54%	256	3%	560	6
	(350)	-17%	2,136	21%	2,486	25
Total Energy Generated & Bought	(370)	-4%	9,577	100%	9,947	100

Revenue

Revenue from sale of electricity in 2017 increased by 1.47% (GH¢42.87 million) to GH¢2,964.97 million over the previous year's sales of GH¢2,922.09 million. This was mainly due to the combined effect of a 4.18% (392GWh) reduction in the volume of energy sold from 9,397GWh in 2016 to 9,005GWh in 2017 and a 2.03% increase in the average tariff of deregulated mines from US$0.129625/kwh in 2016 to US$0.132250/kwh in 2017.

Additionally, the volume of electricity sold to regulated customers which attract relatively lower tariff decreased by 6% (455GWh) from 7,030GWh in 2016 to GWh 6,575 in 2017 whiles the sales to deregulated Customers increased by 1% (31GWh) from 2,367GWh in 2016 to 2,398GWh in 2017 resulting in the overall marginal increase in the revenue. The average Bulk Generation tariff (BGT) of GH¢0.210808 in 2016 was maintained for 2017 as well. A 11.26% depreciation of the average GH¢/US$ exchange rate from GH¢3.9103/US$1 in 2016 to GH¢4.3504/US$1 in 2017 also contributed to the increase in sales revenue.

Cost of Sales

Cost of sales consisting of fuel usage, power purchase, depreciation, salaries, materials, repairs and maintenance and other operating cost, increased by GH¢102.75 million (3.45%) from GH¢2,978.97 million in 2016 to GH¢3,081.73 million in 2017.

This is attributable to the combine effect of the following;

- 37% increase in the volume of gas usage from 24,793,449 MMbtu in 2016 to 34,014,610 MMbtu in 2017 mainly due to Management decision to switch to the use of gas for power generations which was relatively cheaper instead of light crude oil (LCO) and distillate fuel oil (DFO)
- LCO usage dropped by 63.37% from 3.39 million barrels in 2016 to 1.24 million barrels in 2017.
- DFO usage also dropped by 41.73% from 68.77 million litres in 2016 to 40.13 million barrels in 2017.
- A 11.26% depreciation of the average GH¢/US$ exchange rate from GH¢3.9103/US$1 in 2016 to GH¢4.3504/US$1 in 2017 also contributed to the increase in sales revenue.
- Depreciation also increased from GH¢316.89 million in 2016 to GH¢720.03 million in 2017. Due to the effect of the physical assets revaluation in 2016.
- Power importation from CIE dropped significantly by 54% (350GWh) from 560GWh in 2016 to 256GWh in 2017. The reduction was however not enough to cause an overall reduction in the Cost of Sales in 2017.

Administrative Expenses

Administrative expenses reduced by GH¢289.59 million (36.55%) from GH¢792.21 million in 2016 to GH¢502.62 million in 2017

“The decrease in administrative expenses was mainly due to a GH¢250.90 million reduction in the provision for bad and doubtful debts (2016: increase in provision for bad and doubtful debts of GH¢202.74). An accumulated provision of GH¢513.32 million had been made in the accounts in respect of amounts receivable from distressed mines, ECG, Enclave Power, Taqa Generations, VALCO, GRIDCo, Sunon Asogli, CENIT and other receivables in the 2016 accounts. These Long outstanding receivables provided for are mainly arising out of debts from the other Utility Companies and the Government of Ghana.

“These debts subsequently have been captured in the Inter-Utility Debt Matrix for setoffs after which the net positions will be settled using proceeds from the ESLA backed bonds by the Ministry of Finance. This will lead to a significant reduction in the Authority’s receivables hence the reduction in the provisions for bad and doubtful debts in 2017.

The reduction in the Administrative expenses was also attributable to a reduction in employee benefits provision of 72.26% from GH¢100.93 million in 2016 to GH¢28.26 million in 2017 due to the first-time recognition by the Authority and the cumulative provisions made in 2016.

There was a 17.45% increase in staff costs, 139% increase in depreciation expense as well as a 20.93% decrease in repairs and maintenance. The movements in these costs were however, not significant to offset the decrease in administrative costs occasioned by the factors indicated earlier.

Other operating income

“Other operating income increased by 275.21% from GH¢101.08 million in 2016 to GH¢379.25 million in 2017. The main driver of the change was a reduction in provision for bad and doubtful debts amounting to GH¢250.90 million in 2017 (2016: increase in provision of GH¢202.74 million).

The increase was also attributable to a 196% (GH¢11.86 million) increase in service charges in respect of increased volumes of gas sales from N-gas to Sunnon Asogli from GH¢6.0 million to GH¢17.89 million . There was a 40% (GH¢12.65 million) increase in the operating income of the Strategic Business Units of the Authoriy ie. Real Estates, VRA Schools and VRA Hospitals from GH¢31.66 million in 2016 to GH¢44.32 million in 2017 that also accounted for the increase in the other operating income.

Operating Loss

The operating profit of the Group in 2017 was GH¢427.78 million compared to a loss of GH¢190.32 million in 2016. The increase in operating profit was mainly due to an increase in total operating income by GH¢431.29 million (12%) from GH¢3,580.86 million in 2016 to GH¢4,012.15 million in 2017 as against a decrease of GH¢186.84 million (4.95%) in total operating cost from GH¢3,771.19 million in 2016 to GH¢3,584.35 million in 2017. Included in total operating income is a GH¢651.15 million support by the Government of Ghana in respect of the shortfall on tariffs to be received for power generated by the AMERI plant. (2016: GH¢545.48 million).

Net Loss

“The Group ended the year 2017 with a net loss of GH¢605.63 million (2016: GH¢1,223.94 million). The loss for the year is after charging depreciation on fixed assets of GH¢824.93 million (2016: GH¢360.76 million), exchange loss of GH¢335.95 million (2016: GH¢297.47 million), and financial expenses of GH¢779.51 million (2016: GH¢843.62 million).

The financial expenses include finance cost arising from the AMERI Plant Lease arrangement amounting to GH¢307.87 million (2016: GH¢281.69 million) which is to be reimbursed by the Government of Government through the AMERI tariff shortfall.”

2018 OPERATIONAL & FINANCIAL OUTLOOK

"The expected national system demand for 2018 is 16,549GWh, comprising customer demand of 15,879GWh, and transmission losses (GRIDCo) of 670GWh.

The Authority plans to generate a total of 9,098GWh, or 55% whilst Bui Hydro Plant and the Independent Power Producers would generate 7,451GWh or 45% with no supply deficit. The Authority's generation breakdown is as follows: 4,348GWh from hydro sources, 1,107GWh from the Takoradi Thermal Plant, 234GWh from the TT1PP, None from the Mines Reserved Plant, 343GWh from the Kpone Thermal Power Plant, 4GWh from the Solar Plant, 990GWh from AMERI and 44GWh from Power Imports. The Takoradi International Company (TICO) is expected to supply 2,028GWh. Thus, VRA is expected to generate 55% of the national electricity load whilst Bui Hydro Plant and the IPPs will supply 45% with no additional supply required.

The expected power sale for 2018 is GH¢2,940.19 million assuming a Bulk Generation Tariff of GHp28.91/kWh. The other income of about GH¢144.00 million includes a premium of GH¢ 26.44 million meant for administrative costs of gas supply to SAPP. The estimated direct operating cost to be incurred on system generation by the Authority and supply from TICO is GH¢2,827.05 million.
Total administrative cost is expected to be GH¢412.52 million (excluding the Strategic Business Units- SBUs) whilst interest expense and loss on exchange fluctuation on foreign debt would amount to GH¢295.15 million. The Authority is expected to end the year 2018 with a net loss of GH¢167.63 million. The expected operational support to the three SBUs: Health Services, PROPCo and VRA Schools is GH¢118.19 million which is expected to yield an expected revenue of GH¢51.27 million indicating a net expected support of GH¢ 66.92 million.

FINANCIAL SUMMARY (VRA)

	2013 GH¢'000	2014 GH¢'000	2015 GH¢'000	2016 GH¢'000	2017 GH¢'000
Income from Sale of Electricity	2,116,002	2,038,784	2,340,520	2,562,276	2,632,802
Other Operating Income	64,604	105,739	97,132	91,351	353,976
Operating and General Expenses including depreciation	1,932,572	2,243,085	2,874,211	3,367,921	2,910,118
Depreciation	105,074	152,815	190,437	249,556	421,369
Operating Profit/(Loss)	248,034	(98,562)	(436,559)	(168,866)	727,813
Financial Expenses	78,821	308,674	519,881	840,051	771,765
Financial Income	4,286	7,116	6,465	6,736	9,788
Exchange Fluctuation	-87,911	685,698	-407,540	-392,680	396,380
Government Assistance/Subvention/Subsidy	664,274	-	303,569	545,428	651,153
Net Profit/(Loss)	52,249	(996,046)	(1,357,515)	(1,319,682)	(430,544)
Property, Plant and Equipment(Cost/Valuation)	6,095,727	9,200,708	11,013,893	12,369,942	13,329,637
Property, Plant and Equipment (Net Book Value)	2,714,940	5,194,847	6,318,146	7,569,243	7,782,381
Capital Work in Progress	626,855	1,107,520	1,696,303	759,715	834,031
Current Assets	2,265,622	3,808,948	4,404,978	5,018,419	6,110,609
Current Liabilities	1,397,556	3,375,867	5,611,585	7,373,160	6,187,043
Investment by the Rep. of Ghana	495,449	495,449	495,449	495,449	2,924,652
Capital Surplus	2,654,564	3,890,413	4,502,991	4,495,064	4,560,176
Retained Earnings	590,859	287,872	1,469,378	1,904,023	1,854,085
Principal portion of long term loans	444,749	829,004	1,344,960	937,996	944,586
Ghana Cedi (GH¢) to US$ Exchange Rate	2.1616	3.2001	3.7944	4.1811	4.4142

FINANCIAL SUMMARY (VRA)

		2013	2014	2015	2016	2017
Return on Average Equity	%	6.63	(2.48)	(11.27)	(5.00)	16.49
Return on Average Net Fixed Assets -Plant in Operation	%	9.72	(2.93)	(10.12)	(2.43)	9.48
Current Assets Ratio	Times	1.62	1.13	0.79	0.68	0.99
Debt Service Ratio	Times	0.42	0.02	0.07	0.02	0.61
Gearing Ratio	%	11.77	19.95	37.43	26.10	27.00
GWh Generated and Purchased less Station Use (X 106)	GWh	11,323	11,323	9.245	9,873	9,503
Total Production Expense including depreciation per MWh	GH¢	171	198	311	341	306
Total cost of production including depreciation and interest but excluding Debt Fluctuation per MWh	GH¢	178	225	367	426	364
Average Revenue/MWh Generated and Purchased	GH¢	193	189	264	260	273
Total Installed Capacity	MW	2,104	2,104	2,104	2,684	2,684
Ratio of gross hydro generation to firm capability of Akosombo and Kpong	%	149	145	145	88	94.98
System Peak Demand	MW	1,791	1,853	1,853	1,997	2,077
Ratio of System Peak Demand to Installed Capacity	%	85	88	84	74	77.38

REPORT OF THE DIRECTORS TO THE MEMBERS OF THE VOLTA RIVER AUTHORITY

The Directors present their report and the consolidated and separate financial statements of the Authority for the year ended December 31 2017.

The Authority's Directors are responsible for the preparation of the consolidated and separate financial statements that give a true and fair view of the consolidated and separate financial statements of Volta River Authority, comprising the consolidated and separate statement of financial position at December 31 2017, and the consolidated and separate statements of comprehensive income, changes in equity and cash flows for the year then ended, and the notes to the financial statements which include a summary of significant accounting policies and other explanatory notes, in accordance with International Financial Reporting Standards and in the manner required by the Volta River Development Act 1961, (Act 46), as amended by Act 692, (2005). In addition, the Directors are responsible for the preparation of the Report of the Directors

The Authority's Directors are also responsible for such internal control as the Directors determine necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and for maintaining adequate accounting records and an effective system of risk management.

The auditor is responsible for reporting on whether the financial statements give a true and fair view in accordance with the applicable financial reporting framework.

FINANCIAL STATEMENTS

The results for the year are as set out in the attached Financial Statements

NATURE OF BUSINESS

The Authority's primary function is to generate and supply electrical energy for industrial, commercial and domestic use in Ghana. The Authority is also responsible for safe-guarding the health and socio-economic well-being of inhabitants of the communities alongside the lake, and management of any incidental issues including maintenance of the environment. The Authority also provides ferry and hospitality services through its subsidiaries.

There was no change in the nature of business of the Authority during the year.

STATE OF AFFAIRS OF THE AUTHORITY

The Directors consider that the challenges in the finances of the Authority and its Subsidiaries have started a gradual turn around as shown by the positive current ratio. They have also made an assessment of the Authority's ability to continue as a going concern. Given that the VRA is the State's sole electric generation utility, and Government's recent and on-going initiatives to remedy these financial challenges, the Directors are confident and believe the Authority will be a going concern in the years ahead.

FINANCIAL RESTRUCTURING

The Authority made a net loss of GH¢430.54 million in 2017 compared to a net loss of GH¢1,319.68 million in 2016. However, the Authority's current liabilities exceeded its current assets by GH¢76.43 million as compared to 2016 where the current liabilities exceeded its current assets by GH¢2,354.74 million, indicating an improvement in the liquidity position.

The gradual improvement in the bottom line of the Authority emanated from Management's strategic

REPORT OF THE DIRECTORS TO THE MEMBERS OF THE VOLTA RIVER AUTHORITY

decision to switch to the use of relatively cheaper natural gas for power generation as opposed to Light crude oil and Distillate crude oil. Additionally, the Authority received GH¢2,296.45million from ESLA PLC for the repayment of debts owed to some local banks and Suppliers leading to a reduction in financial expenses. The Authority's adherence to strict budgetary limits led to a reduction in costs and also accounted for the improvement in the financial performance.

To further improve the liquidity position and avert the recurrence of a debt build up, the implementation of the Cashflow Waterfall Mechanism, which is being led by the Ministries of Energy and Finance, will ensure that all stakeholders in the power supply chain benefit proportionately from the total revenue collected by the distribution company, Electricity Company of Ghana (ECG), thereby reducing the liquidity risk concerns that have plagued the power sector in recent years.

APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved by the Board of Directors on 26th September, 2018 and are signed on their behalf by:

Kweku Andoh Awotwi
BOARD CHAIRMAN

Emmanuel Antwi-Darkwa
CHIEF EXECUTIVE

INDEPENDENT AUDITORS REPORT TO THE MEMBERS OFTHE VOLTA RIVER AUTHORITY

Opinion

We have audited the consolidated ("the Group") and separate ("VRA") financial statements of Volta River Authority, which comprise the consolidated and separate Statements of Financial Position at December 31, 2017, and the Consolidated and separate Statements of Comprehensive Income, Statement of Changes in Equity and Statement of Cash Flows for the year then ended, and the notes to the Financial Statements which include a summary of significant accounting policies and other explanatory notes, as set out on pages 19 to 63.

In our opinion, these consolidated and separate financial statements give a true and fair view of the consolidated and separate financial position of Volta River Authority as at December 31, 2017, and of its consolidated and separate financial performance and consolidated and separate cash flows for the year then ended in accordance with International Financial Reporting Standards and in the manner required by the Volta River Development Act, 1961 (Act 46), as amended by Act 692 (2005) and the Companies Act 1963, (Act 179).

Basis of Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), together with the ethical requirements that are relevant to our audit of the financial statements in Ghana and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Directors are responsible for the other information. The other information comprises the information included in the Annual Report and the Report of the Directors as required by Volta River Development Act 1961, (Act 46), as amended by Act 692, (2005) but does not include the consolidated and separate financial statements and our auditor's report thereon. Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we concluded that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regards.

Responsibilities of the Directors for the Consolidated and Separate Financial Statements

The Directors are responsible for the preparation of the Financial Statements that give a true and fair view in accordance with International Financial Reporting Standards and in the manner required by the Volta River Development Act 1961, (Act 46) as amended by Act 692, (2005) and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

INDEPENDENT AUDITORS REPORT TO THE MEMBERS OFTHE VOLTA RIVER

In preparing the consolidated and separate Financial Statements, the Directors are responsible for assessing the Group and its subsidiaries' ability to continue as going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.
The Directors are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated and Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the Consolidated and separate Financial Statements as a whole are free from material misstatements, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISAs,) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also;

- Identify and assess the risk of material misstatement of the Consolidated and Separate Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risk, and obtain evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.

- Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertain exists related to events or conditions that may cast significant doubt on the ability to continue as a going concern. If we conclude that a material uncertain exists, we are required to draw attention in our auditors report to the related disclosures in the Financial Statements or, if such disclosure are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors report. However future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Financial Statements, including the disclosures, and whether the Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated and separate financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

INDEPENDENT AUDITORS REPORT TO THE MEMBERS OFTHE VOLTA RIVER

- We communicate with the Directors regarding among other matters, the planned scope and timing of the audit and significant audit findings including any significant deficiencies in internal controls that we identify during our audit.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated and separate financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Directors regarding among other matters, the planned scope and timing of the audit and significant audit findings including any significant deficiencies in internal controls that we identify during our audit.

We also provide the Directors with a statement that we have complied with relevant ethical requirement regarding independence and to communicate with them all relationship and other matters that may reasonably be thought to bear on our independence and where applicable related safe guard.

From the matters communicated with the Directors, we determine those matters that were of most significance in the audit of the Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditors report unless laws or regulations preclude public disclosures about the matter or when in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.
Report on other legal and Regulatory Requirements.
The Companies Act, 1963 (Act 179) as amended requires that in carrying out our audit we consider and report on the following matters. We confirm that:
i we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
iiin our opinion proper books of account have been kept by the Authority and its subsidiaries, so far as appears from our examination of those books; and
iii the Authority's Balance Sheet (included in as the statement of financial position) and profit and loss account (included in as the Statement of Comprehensive Income) are in agreement with the books of account.

The Engagement Partner on the audit resulting in this independent auditor's report is Mr. Timothy A. Osei (ICAG/P/1015)

MGI O.A.K CHARTERED ACCOUNTANTS (No. ICAG/F/2018/132)

T. A. Osei - ICAG/P/1015
18 Airways Avenue
Airport Residential Area
P.O. Box AN. 5712
Accra North
28th September 2018

STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2017

		VRA		GROUP	
		2017	2016	2017	2016
ASSETS	Note	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Property, Plant and Equipment	8b	7,782,381	7,569,243	9,072,754	9,061,339
Intangible Assets	8d	-	-	9	21
Investment in Subsidiaries	9	428,155	375,861	-	-
Investment in Equity Securities		-	-	14,104	-
Investment in Equity-accounted investees	10	-	-	-	72,871
Other long term investments	10b	35,571	72,160	1,035,778	872,488
Trade and other Receivables	12	14,296	13,989	14,296	13,989
Non-current Assets		**8,260,403**	**8,031,253**	**10,136,941**	**10,020,708**
Inventory	11	283,976	237,080	309,949	240,737
Trade and Other Receivables	12	5,278,380	4,377,185	5,791,917	4,670,794
Current Tax Assets	7b	-	-	1,164	240
Short term investments	13	48,414	31,231	121,882	72,001
Cash and Cash Equivalents	14	499,839	372,923	544,488	428,357
Current Assets		**6,110,609**	**5,018,419**	**6,769,400**	**5,412,129**
Total Assets		**14,371,012**	**13,049,672**	**16,906,341**	**15,432,837**
Equity					
Investment by Republic of Ghana	17	2,924,652	495,449	2,924,652	495,449
Retained Earnings Account		(1,854,085)	(1,904,023)	(1,574,881)	(1,112,550)
Revaluation Surplus	18	4,560,176	4,495,064	6,337,221	5,818,463
Debt Contingency Fund Reserve	21	35,571	72,160	35,571	72,160
Government of Ghana Grant	20	-	-	1,232	-
Other Reserves	22	-	-	-	19,151
Total Equity		**5,666,314**	**3,158,650**	**7,723,795**	**5,292,673**
Liabilities					
Employee Benefit Obligations	19	149,136	101,986	178,823	123,930
Trade and other Payables	15	269,740	269,740	269,740	269,740
Capital Grant	21	-	-	46,465	33,445
Deferred Tax	7c	-	-	274	170
Borrowings	16	2,098,779	2,146,136	2,098,779	2,146,136
Non-Current Liabilities		**2,517,655**	**2,517,862**	**2,594,081**	**2,573,421**
Trade and Other Payables	15	5,070,280	4,238,350	5,285,190	4,285,998
Current Tax	7b	-	-	182,276	143,282
Capital Grant	21	-	-	3,789	2,616
Borrowings	16	1,116,763	3,134,810	1,117,210	3,134,847
Current Liabilities		**6,187,043**	**7,373,160**	**6,588,465**	**7,566,743**
Total Liabilities		**8,704,698**	**9,891,022**	**9,182,546**	**10,140,164**
Total Equity and Liabilities		**14,371,012**	**13,049,672**	**6,906,341**	**15,432,837**

The notes on pages 19 to 63 form an integral part of the Financial Statements.
The Financial Statements were approved by the Board of Directors on 26th September, 2018 and are signed on their behalf by:

....

KWEKU ANDOH AWOTWI EMMANUEL ANTWI-DARKWA

STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEAR ENDED DECEMBER 31 ,2017

		VRA		GROUP	
		2017	2016	2017	2016
	Note	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Revenue	2a	2,632,802	2,562,276	2,981,750	2,934,360
Cost of Sales	3	(2,481,155)	(2,692,481)	(3,081,727)	(2,978,974)
Gross Profit/(Loss)		151,647	(130,205)	(99,977)	(44,614)
Other Operating Income	2b	353,976	91,351	379,251	101,076
Government of Ghana Support on AMERI tariff shortfall	2c	651,153	545,428	651,153	545,428
Administrative Expenses	4	(428,963)	(675,440)	(502,619)	(792,211)
		576,166	**(38,661)**	**527,785**	**(145,707)**
Operating profit/(Loss)		**727,813**	**(168,866)**	**427,808**	**(190,321)**
Financial Income	5a	9,788	6,736	121,300	92,690
Gain /(loss) on Loan Restructuring	5b	-	75,179	-	75,179
Financial Expenses	6	(771,765)	(840,051)	(779,509)	(843,615)
Net Exchange Loss		(396,380)	(392,680)	(335,948)	(297,470)
Share of loss of equity-accounted investees-net of tax	10	-	-	-	(17,181)
Loss before taxation		**(430,544)**	**(1,319,68**	**(566,349**	**(1,180,71**
Taxation	7a			(39,281)	(43,220)
Loss for the year		**(430,544)**	**(1,319,682)**	**605,630)**	**(1,223,938)**
Other Comprehensive Income					
Items that will not be reclassified to profit or loss:					
Revaluation of Property, Plant and Equipment	18	509,005	881,940	610,632	1,487,960
Remeasurement of defined benefit liability	19	-	2,949	-	451
Items that are or may be reclassified subsequently to profit or loss:					
Share of OCI of equity-accounted investees-net of tax	10	-	-	19,151	19,151
Other Comprehensive Income, net of tax		**509,005**	**884,889**	**629,783**	**1,507,562**
Total Comprehensive Income		**78,461**	**(434,793)**	**24,153**	**283,624**

The notes on pages 19 to 63 form an integral part of the Financial Statements.

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED DECEMBER 31 ,2017

VRA	Rebublic of Ghana Contribution	Retained Earnings Surplus	Revaluation Surplus	Debt Contingency Fund Reserve	Total Equity
2017	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1st January, 2017	495,449	(1,904,023)	4,495,064	72,160	3,158,650
Loss for the year	-	(430,544)	-	-	(430,544)
Other Comprehensive Income	-	-	509,005	-	509,005
Total Comprehensive Income	**-**	**(430,544)**	**509,005**	**-**	**78,461**
Additional Investments in VRA	2,429,203	-	-	-	2,429,203
Transfer to Retained Earnings (Note 18)	-	443,893	(443,893)	-	-
Transfer to Debt Contingency Fund Reserve	-	36,589	-	(36,589)	-
Balance at 31st December, 2017	**2,924,652**	**(1,854,085)**	**4,560,176**	**35,571**	**5,666,314**
2016					
Balance as at 1st January 2016	495,449	(1,469,378)	4,502,991	64,381	3,593,443
Loss for the year	-	(1,319,682)	-	-	(1,319,682)
Other Comprehensive Income	-	2,949	881,940	-	884,889
Total Comprehensive Income		**(1,316,733)**	**881,940**	**-**	**(434,793)**
Transfer to Retained Earnings (Note 18)	-	889,867	(889,867)	-	-
Transfer to Debt Contingency Fund Reserve	-	(7,779)	-	7,779	-
Balance at 31st December, 2016	**495,449**	**(1,904,023)**	**4,495,064**	**72,160**	**3,158,650**

Continued

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED DECEMBER 31 ,2017

GROUP	Rebublic of Ghana Contribution	Retained Earnings Surplus	Revaluation Surplus	Debt Contingency Fund Reserve	Government of Ghana Grant	Other Reserves	Total Equity
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1st January, 2017	495,449	(1,112,550)	5,818,463	72,160		19,151	5,292,673
Loss for the year	-	(605,630)	-	-		-	(605,630)
Other Comprehensive Income	-	-	610,632	-		19,151	629,783
Total Comprehensive Income	**-**	**(605,630)**	**610,632**	**-**	**-**	**19,151**	**24,153**
Additional Investments in VRA	2,429,203	-	-	-	-	-	2,429,203
*Prior year adjustments	-	14,836	-	-	-	-	14,836
Government of Ghana Grant	-	-		-	1,232	-	1,232
Transfer to Retained Earnings (Note 18)	-	449,192	(449,192)	-	-	-	-
Transfer	-	(357,318)	357,318	-	-	-	-
Transfer to Debt Contingency Fund Reserve	-	36,589	-	(36,589)	-	-	-
Balance at 31st December, 2017	**2,924,652**	**(1,574,881)**	**6,337,221**	**35,571**	**1,232**	**38,302**	**7,762,097**
2016							
Balance at 1st January, 2016	495,449	(781,973)	5,231,192	64,381	-	-	5,009,049
Loss for the year	-	(1,223,938)	-	-	-	-	(1,223,938)
Other Comprehensive Income	-	451	1,487,960	-	-	19,151	1,507,562
Total Comprehensive Income	**-**	**(1,223,487)**	**1,487,960**	**-**	**-**	**19,151**	**283,624**
Transfer to Retained Earnings (Note 18)	-	900,689	(900,689)	-	-	-	-
Transfer to Debt Contingency Fund Reserve	-	(7,779)	-	7,779	-	-	-
Balance at 31st December, 2016	**495,449**	**(1,112,550)**	**5,818,463**	**72,160**	**-**	**19,151**	**5,292,673**

* Prior year adjustment relates to the reclassification of reserves due to accounting for VRA's investments in TAPCO using cost accounting instead of equity accounting method.

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2017

		VRA		GROUP	
		2017	2016	2017	2016
	Note	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Net Cash from Operating Activities	23	**712,452**	**697,044**	**815,975**	**801,056**
Cash Flows from Investing Activities					
Interest Received			-	15,143	7,331
Purchasing of Property, Plant and Equipment		(63,220)	(2,804)	(131,186)	(76,666)
Proceeds from sales of Property, Plant and Equipment	8c	18	2,199	18	2,281
Deferred expenditure		-	-	(30)	-
Acquisition of long term investments		-	(56,557)	-	(56,557)
Payments towards Capital Work-In-Progress		(74,315)	(224,885)	(93,052)	(231,578)
Net Cash used in investing activities		**(137,517)**	**(282,047)**	**(209,107)**	**(355,189)**
Cash flows from Financing Activities					
Proceeds from loans and borrowings		2,429,203	2,589,146	2,429,203	2,589,146
Repayment of borrowings		(2,933,440)	(2,357,240)	(2,933,440)	(2,357,507)
Payment of finance lease obligations		301,101	(298,292)	301,101	(298,292)
Shareholders advance to NEDco				66	
Net Cash used in financing activities		**(203,136)**	**(66,386)**	**(203,070)**	**(66,653)**
Net increase/(decrease) in Cash and cash equivalents		**371,799**	**348,611**	**403,798**	**379,214**
Cash and cash equivalents at the beginning of the year		**159,095**	**(208,963)**	**255,262**	**(143,442)**
Exchange rate fluctuation on cash and cash equivalents		**12,532**	**19,447**	**2,036**	**19,490**
Cash and cash equivalents at the end of the year		**543,426**	**159,095**	**661,096**	**255,262**

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

The Authority was incorporated by the Volta River Development Act 1961, (Act 46), as amended by Act 692, (2005) and it is domiciled in Ghana. These consolidated financial statements comprise of the Authority and its subsidiaries (together referred to as the "Group") for the year ended 31st December 2017 and the Group's interest in associates. The separate financial statements as at and for the year ended 31st December, 2017 comprise the financial statements of the Authority.

1.1 Basis of measurement

The Consolidated and separate Financial Statements ("Financial Statements") have been prepared on the historical cost basis, except for property, plant and equipment and available-for-sale financial assets that have been measured at fair value.

1.2 Statement of Compliance

The Financial Statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and its interpretations adopted by the International Accounting Standards Board (IASB) in the manner required by the Volta River Development Act, (Act 46), as amended by Act 692, (2005).

1.2.1 Functional and Presentation Currency

The financial statements are presented in Ghana Cedis which is the Authority's functional currency. All financial information presented in Ghana have been rounded to the nearest thousand, except where otherwise indicated.

1.2.2 Use of judgements and estimates

In preparing these consolidated and separate Financial Statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets and liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions in estimates are recorgnised prospectively.

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the Consolidated Financial Statements is included in the following notes:

- Note 16d - leases: whether an arrangement contains a lease.
- Note 16d - lease classification.
- Note 10 - consolidation: whether the Group has significant influence even though it holds less than 20 percent of the voting rights of another entity.

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the Consolidated Financial Statements is included in the following notes:

- Note 19c -measurement of defined benefit obligation: key actuarial assumptions.
- Note 1.8.2.9 - impairment losses.

Indexation revaluation of property, plant and equipment

In line with international best practice, it has been the Authority's policy to have its assets revalued by independent, professional valuers every five years. However, in order to avoid sudden large changes in the value of the assets base, and consequently in the return that the Authority is covenanted to achieve for both the International Lending Agencies and the Government of Ghana.

Indexation revaluation of property, plant and equipment

The composite index used for the annual revaluation is therefore based on the premise that the Authority's assets base increase by the general price levels in the US Dollar and translated into Ghanaian Cedi terms for finance reporting. The computation of a composite index is based on the exchange rate between the GH¢ and the US dollar, and the annual CPI in the US. The assumption underlying the selection of the US inflation base is that the Authority's assets base is about 85% foreign-currency procured from the United States and Europe. Furthermore, most of the items are obtained from advanced countries like the United States, Europe and Asia (China) where price levels are fairly stable or increase marginally. The Authority thus assumed that the US inflation rates fairly represents the general price levels for foreign purchases made by the VRA.

1.3 Basis of Consolidation

The Authority's 2017 Consolidated Financial Statements include the results of the Authority and its subsidiaries.

Business combinations

Business combinations are accounted for using the acquisition method when control is transferred to the Group. The consideration transferred in the acquisition is measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on a bargain purchase is recognized in profit or loss immediately. Transaction costs are expensed as incurred, except where they relate to the issue of debt or equity securities.

The consideration transferred does not include amounts that relate to the settlement of pre-existing relationships, such amounts are generally recognized in profit or loss.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not re-measured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in profit or loss.

Subsidiaries

Subsidiary is an entity which the Group has power over, rights to variable returns and the ability to use its power to affect those returns. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date when control ceases. The financial statements of the subsidiaries used to prepare the consolidated financial statements were prepared as of the Authority's reporting date. The subsidiaries consolidated are Volta Lake Transport Company (VLTC), Akosombo Hotel Limited (AHL), Northern Electricity Distribution Company (NEDCo) and Takoradi Power Company Limited (TAPCO).

Transactions eliminated on Consolidation

Intra-group balances and transactions, and any unrealized income and expenses (Except foreign currency transaction gains or losses) rising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Loss of Control

When the Group losses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, any related non-controlling interests and other components of equity. Any surplus or deficit arising on the loss of control is recognized in profit or loss. Any retained interest in the former subsidiary is accounted for as an equity-accounted investee or in accordance with the Group's accounting policy for financial instructions.

Interests in equity-accounted investees

The Group's interest in equity-accounted investees comprise interests in associates. Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. Interest in associates are accounted for using the equity method. They are initially recognised at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements including the Group's share of the profit or loss and OCI of equity-accounted investees, until the date on which significant influence ceases.

Separate financial statements

In the separate financial statements, investments in subsidiaries and associates are accounted for at cost less impairment. Cost also includes direct attributable costs of investment.

1.4 New standards and interpretations not adopted

A number of new standards, amendments to standards and interpretation are effective for annual periods beginning after 1st January, 2017, and have not been applied in preparing these financial statements, Those which may be relevant to the Authority are set out below. The Group does not plan to adopt this standard early and the extent of the impact has not been determined.

Standard/Interpretation		Effective date
IFRS 16	Leases	1 January, 2019
IFRS 9	Financial Instruments	1 January, 2018
IFRS 15	Revenue from contracts with customers	1 January, 2018
IAS 7	Disclosure Initiative	1 January, 2017
IAS 12	Recognition of Deferred Tax Assets for Unrealised Losses	1 January, 2017

IFRS 16 Leases

IFRS 16 introduces a single, on-balance sheet accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lessee liability representing its obligation to make lease payments. There are optional exemptions for short-term leases and leases of low values. Lessor accounting remains similar to the current standard - i.e. lessors continue to classify leases as finance or operating leases. IFRS 16 was issued in January 2016. It sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract i.e. the customer ('lessee') and the supplier ('lessor'). IFRS 16 replaces the previous leases Standard, IAS 17 Leases, and related Interpretations. IFRS 16 has one model for lessees which will result in almost all leases being included on the Statements of financial Position. No significant changes have been included for lessors.

The standard is effective for annual periods beginning on or after 1 January, 2019, with early adoption permitted only if the entity also adopts IFRS 15. The transitional requirements are different for lessees and lessors. The group is assessing the potential impact on the financial statements resulting from the application of IFRS 16.

IFRS 9 Financial Instrument

On 24th July 2014, the IASB issued the final IFRS 9 Financial Instruments Standard, which replaces earlier versions of IFRS 9 and completes the IASB's project to replace IAS 39 Financial Instruments: Recognition and Measurements. IFRA 9 includes revised guidance on the classification and measurement of financial instruments, a new expected credit loss model for calculating impairment on financial assets, and new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. The Group is assessing the potential impact on its consolidated and separate Financial Statements resulting from the application of IFRS 9.

The standard is effective for annual periods beginning on or after 1 January 2018 with retrospective application, early adoption is permitted.

IFRS 15 Revenue from contracts with customers

The standard contains a single model that applies to contract with customers and two approaches to recognising revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognised.

The Group is currently in the process of performing more detailed assessment of the impact of this standard on the Group and will provide more information in the year ended 31 December 2016 financial statements.

The standard is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.

Disclosure Initiative (Amendments to IAS 7)

The amendments provide for disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes. This includes providing a reconciliation between the opening and closing balances for liabilities arising from financing activities.

The amendments apply for annual periods beginning on or after 1 January 2017 and early application is permitted.

Recognition of Deferred Tax Assets for Unrealised Losses (Amendments to IS 12)

The amendments provide additional guidance on the existence of deductible temporary difference, which depends solely on a comparison of the carrying amount of an asset and its tax base at the end of the reporting period, and is not affected by possible future changes in the carrying amount or expected manner of recovery of the asset.

The amendments also provide additional guidance on the methods used to calculate future taxation profit to establish whether a deferred tax asset can be recognised.

Guidance is provided where an entity may assume that it will recover an asset for more than its carrying amount, provided that there is sufficient evidence that it is probable that the entity will achieve this.

Guidance is provided for deductible temporary differences related to unrealised losses are to be assessed separately for recognition. These are assessed on a combined basis, unless tax law restricts the use of losses to deductions against income of specific type.

The amendments apply for annual periods beginning on or after 1 January, 2017 and early application is permitted.

1.5.0 SUMMARY OF SIGNIFICANT ACCOUNTING STATEMENTS

1.5.1 Revenue

(i) Sale of Electricity

Revenue from sale of electricity is recognised when the significant risk and rewards of ownership have been transferred to the customer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods and the amount of revenue can be measured reliably. Revenue from the sale of electricity is measured net of returns, trade discounts, taxes and volume rebates. Revenue from the sale of electricity is recognised when the electricity is transmitted to the customer.

1.5.2 Income from rendering of services

Revenue from rendering of services is recognised when the services have been rendered, recovery of the consideration is probable and the amount of revenue can be measured reliably.

1.5.3 Finance income and expenses

The Group's finance income and finance expenses include:

- interest income on funds invested or held in bank accounts
- interest expenses on loans and borrowings
- interest cost on finance lease obligation
- interest on delayed invoices

Interest income and expense is recognised, as it accrues in profit or loss, using the effective interest method.

1.5.4 Government Grant

Grant and assistance from the government are recognised as deferred income at fair value if there is reasonable assurance that the grant will be received and that the Group will comply with the conditions associated with the grant; they are then recognised in profit or loss as other income on a systematic basis over the useful life of the asset. A grant tied to non-current asset is deducted from the gross cost of the related asset to get the carrying value of the asset. A grant intended to cover expenses is reported in profit or loss on a systematic basis in the periods in which the expenses are recognised.

1.5.5 Foreign currency translations

Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions, and from the translation at year-end exchange rates of monetary assets and liabilities denominate in foreign currencies, are recognised in profit or loss.

Non-monetary assets and liabilities are translated at historical exchanges rates, if held at historical cost or exchange rates at the date that fair value was determined, if held at fair value and the resulting foreign exchange gains and losses are recognised in profit or loss.

(i) Foreign Operations

The assets and liabilities of foreign operations are translated into Ghana Cedi at the spot exchange rates at the reporting date. The income and expenses of foreign operations are translated into Ghana Cedi at the average exchange rates for the period.

Foreign currency differences arising on the translation of assets and liabilities of foreign operations are recognised in other comprehensive income and presented within equity. When a foreign operation is disposed off, the cumulative amount in equity related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal.

1.5.6 Financial Instruments

The Group classifies non-derivative financial assets into the loans and other receivables category and classifies non-derivative financial liabilities into the other financial liabilities category.

The Group initially recognises loans and receivables and debt securities on the date when they originate and all other financial assets and financial liabilities on the date of trade when the entity becomes a party to contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flow from the asset expires, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all risk and rewards of ownership of the financial asset are transferred, or it retains control over the transferred asset.

Any interest in such derecognised financial asset that is created by the Group is recognised as a separate assets or liability. The Group derecognises a financial liability when its contractual obligation are discharged, cancelled or expire. The Authority's financial assets include cash and bank balances, trade and other receivables, short term investment and investments in equity securities.

1.5.7 Financial Assets

Loans and receivables comprise of Cash and Bank Balances, short term investments, shareholder advance to NEDCo and trade and other receivables.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These assets are initially measured at fair value plus any directly attributable transaction cost. Subsequent to initial recognition, they are measured at amortised cost using the effective interest method. Short-term receivables with no stated interest rate are measured at the original invoice amount if the effect of discounting is immaterial.

Impairment

Financial assets not classified at fair value through profit or loss are assessed at each reporting date to determine whether there is objective evidence of impairment.

Objective evidence that financial assets are impaired includes default or delinquency by a debtor, restructuring of an amount due to the Group on terms that the Group would not consider otherwise, indications that a debtor will enter bankruptcy, adverse changes in the payment status of borrowers, economic conditions that correlate with defaults.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account against loans and receivables. When the Group considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. Interest on the impaired asset continues to be recognised. When an event occurring after the impairment was recognised caused the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

The Group considers evidence of impairment for these assets at both individual and collective levels. All individually significant financial assets are assessed for impairment on an individual basis. Those found not to be impaired are then collectively assessed for any impairment that has been incurred but not yet individually identified. Assets that are not individually significant are collectively assessed for impairment.

Collective assessment is carried out by grouping together assets with similar risk characteristics.
In assessing collective impairment, the Group uses historical information on the timing of recoveries and the amount of loss incurred, and makes an adjustment if current economic and credit conditions are such that the actual losses are likely to be greater or lesser than suggested by historical trends.

1.5.8 Financial Liabilities

Non-derivative financial liabilities are initially measured at fair values less any directly attributable transaction cost. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.
Other financial liabilities comprise of loans and borrowing and trade and other payables.

1.5.9 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis.

1.5.10 Property, Plant and Equipment

(i) Recognition and Measurement

Property, Plant and Equipment are measured at revalued amount less accumulated deprecation and any accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an items of property, plant and equipment have different useful lives, they are accounted for a separate items (major components).
Any accumulated depreciation at the date of revaluation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the assets after taking into account accumulated impairment losses. An increase in the carrying amount of property, plant and equipment as a result of a revaluation is recognised in other comprehensive income and accumulated in equity under revaluation reserve.

However, the increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

A revaluation decrease is recognised in profit or loss. However, the decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation reserve in respect of that asset. The surplus on revaluation is transferred to retained earnings as the relevant revalued assets is used. The amount transferred is the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Valuations are performed with sufficient regularity to ensure that the fair value of a revalued asset does not differ materially from, its carrying amount.
Any gain or loss on the disposal of an item of property, plant and equipment (calculated as difference between the proceeds from disposal and carrying amount of the item) is recognised in profit or loss.

(ii) Subsequent cost

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Authority and its cost can be measured reliably. The costs of the day-to-day servicing and maintenance of property, plant and equipment are recognised in profit or loss as incurred.

(iii) Depreciation

Depreciation is calculated and recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Freehold land is not depreciated.
Depreciation is charged in the year in which an asset is acquired or a capital work-in-progress is available for use. The annual depreciation rate and estimated useful lives for the current and comparative years of significant items of major classes of depreciation property, plant and equipment are as follows;

	Rate of Depreciation (%)	Useful life
Dam, Powerhouse and Civil Works	Between 0.67 and 2.2	45 - 150
Transmission Network	Between 2.2 and 3.3	30 -45
Akosombo/Akuse Township	2.5	40
Buildings	2.5	40
Hydro Generating Plant and Machinery	Between 2.2 and 3.0	33 - 45
Aviation and Marine Equipment	12.5	8
Motor Vehicles	Between 10.0 and 25.0	4 -10
Equipment and Furniture	Between 12.5 and 25.0	4 -8
Meters/Consumer Connections	Between 4.0 and 5.0	20 - 25
Thermal Generating Plants and Machinery	Between 4.0 and 10.0	10 - 25
Distribution Network	Between 2.5 and 4.0	25 -40
Computer Equipment	Between 20.0 and 25.0	4 -5
Communication Equipment	Between 3.3 and 6.7	15 -30

Leased assets are amortised over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is amortised over the shorter of the estimate useful life or leased term.

Depreciation methods, useful lives and residual values are reassessed at each reporting date and adjusted if appropriate.

(iv) Capital work-in-progress

Property, plant and equipment under construction are stated at initial cost and depreciated from the date the asset is available for use over its estimated useful life. Cost of capital work-in-progress include the cost of materials and direct labour, and any other cost directly attributable to bringing the asset to a working condition for its intended use.

Assets are transferred from capital work-in-progress to an appropriate category of property, plant and equipment when they become ready for its intended use.

(v) Impairment of Non-financial Assets

The carrying amount of the Group's non-financial assets, other than inventories and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or Cash Generating Unit (CGU) exceeds its recoverable amount.

For impairment testing, assets are grouped together into the smallest group of assets that generated cash inflows from continuing use that are largely independent of the cash inflows of other assets.

The recoverable amount of the asset is the greater of its value in use and its fair value less cost to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset of CGU.
An impairment loss is recognised if the carrying amount of the asset or CGU exceeds its recoverable amount.

All impairment losses are recognised in profit or loss. They are allocated to reduce the carrying amount of assets in the CGU on a pro rata basis.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

1.5.11 Intangible Assets

Software acquired by the Group is stated at cost less accumulated amortisation and accumulated impairment losses.

1.5.11 Intangible Assets

Subsequent expenditure on software assets is capitalised only when it increased the future economic benefits embodied in the specific asset to which it related. All other expenditure is expensed as incurred. Amortisation is recognised in profit of loss on a straight-line basis over the estimated useful life of the software, from the date that it is available for use. The estimated useful life of software is up to five-years.

1.5.12 Borrowing Costs

Borrowing costs are recognised, as an expense, in the period in which they are incurred, except to the extent that they are capitalised. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised as part of the cost of that asset when it is probable that they will result in future economic benefits to the entity and that the costs can be measured reliably.

Borrowing cost that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

1.5.13 Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the weighted average principle, and includes expenditure incurred in acquiring the inventories and bringing them to their existing location and condition.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

1.5.14 Cash and Cash Equivalents

In the statement of cash flows, cash and cash equivalents include short term investments and bank overdrafts that are repayable on demand and from an integral part of the Group's cash management. Cash and short-term deposits in the statement of financial position comprises cash at bank and on hand and short-term deposits with an original maturity of three months or less.

1.5.15 Employee Benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

Defined Contribution Plans

A defined contribution plan is a post-employment benefit plan under which the Group pays fixed contributions to a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expenses in profit or loss in the periods during which services are rendered by employees.

The Group has the following defined contribution schemes:

Social Security and National Insurance Trust

Under the national pension scheme, the Group contributes 13% of employees' basic salary to the Social Security and National Insurance Trust (SSNIT) for employee pensions. The Group's obligation is limited to the relevant contributions, which have been recognised in the financial statements. The pension liabilities and obligations, however, rest with SSNIT.

Provident Fund

The Group has a Provident Fund Scheme for all employees who have completed their probation period with the Group. The Group contributes 10% of their basic salary to the Fund. Obligations under the plan are limited to the relevant contributions which have been recognised in the financial statements and are settled on due dates to the fund manager.

Defined benefit plans

The Group's obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefits that employee have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. Re-measurements of the net defined benefit liability, which comprise actuarial gains and losses is recognised immediately in other comprehensive income.

The Group determines the net interest expense (income) on the defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the defined benefit liability at the period end, taking into account any changes in the defined benefit liability during the period as a result of contributions and benefit payments.

Net interest expenses and other expenses related to defined benefit plants are recognised in personnel expenses in profit or loss. When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefits that relate to past services or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

The Group has the following defined benefit plans:

Long-service awards

The defined benefit scheme entitles employee to a benefit package at the end of their service with the Group. This benefit package is paid at the point of exit on scale that have been graduated based on the length of services ranging from 10 to 40 years and more.

Severance benefits

This relates to reward (packages) paid to employees who attain certain milestone with the Group and exit before their due date of retirement.

Post-retirement medical benefit

There is no contribution by the employee toward this benefit and no insurance scheme. The employer simply bears the medical costs (no cap defined) of the retiree and their spouse for as long as the retiree is alive. After the death of the retiree, the spouse will be taken care of for 6 months after which they will be removed from the scheme.

1.6.0 Leases

(i) Determining whether an arrangement contains a lease. At inception of an arrangement, the Group determines whether the arrangement is or contains a lease.

At inception or on reassessment of an arrangement that contains a lease, the Group separates payments and other considerations required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently, the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the interest rate implicit in the lease.

(ii) Leased Assets

Leases of Property, Plant and Equipment that transfer to the Group substantially all of the risk and rewards of ownership are classified as finance leases. The leased assets are initially measured at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the assets are accounted for in accordance with the accounting policy applicable to that asset.

The Group determines the net interest expense (income) on the defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the defined benefit liability at the period end, taking into account any changes in the defined benefit liability during the period as a result of contributions and benefit payments.

Assets held under any other leases are classified as operating lease and are not recognised in the Group's statement of financial position.

(ii) Leased Payment

Payments made under operating leases are recognised in profit or loss on a straight line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

Minimum lease payments made under finance leases are apportioned between the finance expenses and the reduction of the outstanding liability. The finance expenses is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Leasehold Improvements

Leasehold improvements are measured at cost less accumulated depreciation and any accumulated impairment losses. Subsequent expenditure is capitalised only if it is probable that the future economic benefits associated with the expenditure will flow to the Group. Ongoing repairs and maintenance are expensed as incurred. Leasehold improvements are capitalised and depreciated over the shorter of the useful lives of the assets and the lease term.

1.6.1 Tax Expense

Tax expense comprises current and deferred tax. Income tax is recognised in profit or loss except to the extent that it relates to items recognised directly in equity or in other comprehensive income.

(a) Current Tax

Current tax comprises the expected tax payable or receivable on taxable incomes or losses for the year and any adjustment to the tax payable or receivable in respect of previous years. It is measured using tax rates enacted or substantively enacted at the reporting date. Current tax also includes any tax arising from dividends.

(b) Deferred Tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the corresponding amounts used for taxation purposes. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax is measured at tax rates that are expected to be applied to temporary difference when they reverse, using tax rates enacted or substantively enacted at the reporting date. A deferred tax asset is recognised only to the extent that it is probable that future taxable profit will be available against which the asset can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax assets an liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or the tax assets and liabilities will be realised simultaneously.

1.7.0 Determination of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. Significant valuation issues are reported to the Group's Board of Directors.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. prices) or indirectly (i.e. derived from prices). liabilities
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change occurred.

1.8.0 Business an Financial Risk Management

The Group's operations are exposed to a number of risks. To address these risks. The Authority has established a risk management process that is based on the following components:

- Standardised risk definition
- Reliable methods for measuring risks
- Identifying the origination of risks
- Effective risk management for manageable risks
- Reporting in accordance with established routines
- Management in accordance with establish strategies and fixed rules

1.8.1 Risk Mandate and Risk Management Structure

The Board of Directors has overall responsibility for internal control and risk management at Volta River Authority. The Board has, in turn, given Volta River Authority's Management a risk mandate. Management allocates this mandate to Volta River Authority's business units in accordance with a delegation structure. Each unit manages its own risks and has some room to manoeuvre within its respective mandate. The results achieved by the units are followed up on a continuous basis and reported to the Executive Management by an independent risk control function, Internal Audit, which is also responsible for monitoring the Group's overall risk mandate.

1.8.2 Risk

Political Risks, operational risks, environmental risks and legal risks are general in nature and exist in all units throughout the Group. Insurable risks are managed centrally by Volta River Authority 's Legal Services Department. The more specific risks in each part of the value chain are discussed below:

1.8.2.1 Political Risk

This refers to the commercial risk that can arise as a result of political decisions. Examples of this are price regulations in electricity distribution and transmission, uncertainty regarding changes in government, or changes in finance and energy policies.

A change in the rules governing the energy industry is another type of political risk faced by the group. These may include factors such as changes in taxation, introduction of environmental surcharges and changes in the political goals in respect of the energy sector. This type of risk is more difficult to predict and manage. To mitigate this, the group conducts active business intelligence activities and maintains contacts with key decision makers and relevant stakeholders. The Group also belongs to various national and international trade organisations.

1.8.2.2 Operational Risk

Operational Risk refers to the risk of incurring financial loss, or loss of trust, due to errors or defects in the company's administrative routines. Operational risk can be divided into the following categories:

- Administrative Risk - the risk of loss due to defects in the Group's division of responsibility, competence, reporting routines, risk measurement and evaluation models, and controls and follow-up routines.
- Legal Risks - this includes risk of loss arising from the non-fulfilment of contracts due to shortcomings in documentation, counterparties lacking the right to enter into contracts or uncertainties regarding contract validity.
- IT Risks - the risk of loss due to defects in IT systems.
- Safety Risks - the risk of outages due to deficient safety work.

1.8.2.3 Electricity Price Risk

Electricity Price Risk is the risk that has the greatest bearing on the Group's operations. Electricity prices are determined by the Public Utilities Regulatory Commission (PURC).

To determine the value of electricity price risk in electricity generation, the Group simulates an anticipated outcome in the electricity tariffs. Forecasts of anticipated generation levels are drawn up, which then serve as the basis for how much is to be anticipated as losses due to tariffs.

1.8.2.4 Price Category Risk

Price Category Risk arises when the price of electricity differs between various customer categories. Volta River Authority's price categories risk is controlled centrally and is managed by the Group's Business Development and Sales Department.

1.8.2.5 Volume Risk

Volume Risk consists of deviations in anticipated and actually delivered volumes to a customer. This is manage by improving and developing forecasts of electricity consumption. In addition, Volume Risk is considered when drawing up the terms of contracts with customers.

1.8.2.6 Fuel Price Risk

Measurement and management of Fuel Price Risk is conducted within the Finance Department. Fuel prices are affected by macroeconomic factors, among other things. The Group manages fuel price risk by forecasting and analysing price trends.

1.8.2.7 Investment Risk

The Group is a highly capital-intensive institution and, consequently, has an extensive capital investment program. Prior to every investment decision, a risk analysis is performed by simulating outcomes of price, cost, delays and cost of capital, the risk associated with each individual investment is assessed.

1.8.2.8 Plant Risk

The Group's largest insurable risks are associated with the operation of power generating plants. The Group's plants can be damaged as a result of incidents and breakdowns which, as a rule, give rise to substantial costs due to shutdowns. Such plant risks are minimised through loss-prevention measures, good maintenance, training and effective administrative outlines. The plants are also insured against unforeseen occurrence.

1.8.2.9 Credit Risk

Credit Risk is the risk of financial loss to the Authority if a customer or counter party fails to meet its contractual obligations and arises principally from the Authority's receivables from customers.

The Group's principal exposure to credit risk is in its trade and other receivables, and loans to related parties. Trade receivables principally represent amounts owed to the Authority by their customers and credit risk is managed at that level. Credit evaluations are performed on all customers requiring credit over a certain amount. The Group has no significant concentration of credit risk, with exposure spread over a large number of customers.

Exposure to Credit Risk

The carrying value of the Group's financial assets represents its maximum exposure to Credit Risk. The maximum exposure to Credit Risk at the reporting date was:

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade Receivables	2,898,372	2,891,796	3,774,139	3,532,271
Receivables from related parties	551,552	458,936	-	-
Other receivables including receivables from Government of Ghana but excluding fuel receivables from Tema Oil Refinery	2,045,260	1,254,688	2,236,396	1,382,521
Staff Debtors	28,058	20,571	36,446	28,312
Cash and cash equivalents (excluding cash-on-hand)	499,639	372,746	544,238	428,152
Long-term investments	35,571	72,160	1,049,882	872,488
Short-term investments	48,415	31,231	121,882	72,001
	6,106,867	**5,102,128**	**7,762,983**	**6,315,745**

The maximum exposure to credit risk for trade receivables at the reporting date by type of counter party was:

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Wholesale (ECG)	134,248	841,482	547,380	439,103
Distribution to end-users	2,764,124	2,050,314	3,226,759	3,093,168
	2,898,372	**2,891,796**	**3,774,139**	**3,532,271**

Continued

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

Impairment Losses

The ageing of trade receivables at the reporting date was:

VRA	Gross	Impairment allowance	Gross	Impairment allowance
	31-Dec-17	31-Dec-17	31-Dec-16	31-Dec-16
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	594,931	-	690,816	-
Past due 30-60 days	77,535	-	232,027	-
Past due 60-90 days	68,693	-	92,956	-
Past due 90-120 days	143,096	-	129,870	-
Past due 120 days and above and impaired	2,014,117	280,751	1,746,127	513,321
	2,898,372	**280,751**	**2,891,796**	**513,321**

GROUP	Gross	Impairment allowance	Gross	Impairment allowance
	31-Dec-17	31-Dec-17	31-Dec-16	31-Dec-16
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Not past due nor impaired	624,066	-	720,108	-
Past due 30-60 days	103,935	-	258,046	-
Past due 60-90 days	93,115	-	117,700	-
Past due 90-120 days	169,119	-	155,712	-
Past due 120 days and above and impaired	2,783,904	296,001	2,280,705	546,929
	3,774,139	**296,001**	**3,532,271**	**546,929**

Impairment losses have been recognised for specific customers whose debts are considered impaired.

Management believes that the unimpaired amounts that are past due by more than 30 days are still collectible in full, based on historical payment behaviour and extensive analysis of customer credit risk.

No impairment loss was recognised for financial assets other than trade receivables.

1.8.2.10 Liquidity Risk

Liquidity Risk is the risk that the Authority will not be able to meet its financial obligations as and when they fall due. The Authority has had liquidity challenges and defaulted in some repayment obligations.

December 31, 2017 - VRA

	Total Amount	Less than 6months	6-12 months	1-2 years	3-4 years	More than 5years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	4,743,409	4,703,753	39,656	-	-	-
Payable to related parties	33,016	-	33,016	-	-	-
Accrued Expenses	29,767	29,767	-	-	-	-
Sundry creditors, excluding statutory obligations	264,088	144,199	119,889	-	-	-
Borrowings, excluding finance lease obligations	2,127,006	486,681	350,636	393,003	806,009	90,678
Other payables- non-current	269,740	-	-	269,740	-	-
Finance Lease Obligations	1,088,536	309,528	228,045	314,720	236,243	-
	8,555,562	5,673,928	771,243	977,463	1,042,252	90,678

December 31, 2016 - VRA

	Total Amount	Less than 6months	6-12 months	1-2 years	3-4 years	More than 5years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	3,964,831	2,002,377	1,962,454	-	-	-
Payable to related parties	34,198	-	34,198	-	-	-
Accrued Expenses	889	889	-	-	-	-
Sundry creditors, excluding statutory obligations	129,739	9,850	119,889	-	-	-
Borrowings, excluding finance lease obligations	4,254,219	1,730,458	1,227,825	286,157	703,401	306,378
Other payables- non-current	269,740	-	-	269,740	-	-
Finance Lease Obligations	1,026,726	132,341	71,968	183,869	603,951	34,597
	9,680,342	3,875,915	3,416,334	739,766	1,307,352	340,975

Continued

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

December 31, 2017 - GROUP

	Total Amount	Less than 6months	6-12 months	1-2 years	3-4 years	More than 5years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	4,983,922	4,703,753	280,169	-	-	-
Payable to related parties	-	-	-	-	-	-
Accrued Expenses	30,170	30,170	-	-	-	-
Sundry creditors, excluding statutory obligations	275,840	-	-	275,840	-	-
Borrowings, excluding finance lease obligations	2,127,453	487,127	350,636	393,003	806,009	90,678
Other payables- non-current	316,558	-	-	-	-	316,558
Finance Lease Obligations	1,088,536	309,528	228,045	314,720	236,243	-
	8,822,479	5,530,578	858,851	983,563	1,042,252	407,236

December 31, 2016 - GROUP

	Total Amount	Less than 6months	6-12 months	1-2 years	3-4 years	More than 5years
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade payables	4,033,092	2,070,638	1,962,454	-	-	-
Payable to related parties	4,204	-	4,204	-	-	-
Accrued Expenses	1,451	1,451	-	-	-	-
Sundry creditors, excluding statutory obligations	135,474	15,585	119,889	-	-	-
Borrowings, excluding finance lease obligations	4,254,256	1,730,495	1,227,825	286,157	703,401	306,378
Other payables- non-current	269,740	-	-	269,740	-	-
Finance Lease Obligations	1,026,727	132,341	71,967	183,870	603,952	34,597
	9,724,944	3,950,510	3,386,339	739,767	1,307,353	340,975

1.8.2.11 Market Risk

Market Risk is the risk that changes in market prices, such as foreign currency and interest rates etc. will affect the Authority's income or the value of its holdings of financial instruments. The objective of Market Risk management is to manage and control Market Risk exposures within acceptable parameters, while optimising the return on risk.

(i) Currency Risk

Currency Risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to the changes in the foreign exchange rates.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

Exposure to Currency Risk

Group's exposure to foreign currency risk was as follows based on notional amount:

2017-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	495,477	-	-	-	-	-	-	-	-	-
Cash and Bank balances	81,394	2,121	-	-	-	10	-	-	-	-
Investments	16,016	-	-	-	-	-	-	-	-	-
Account payables	(1,141,650)	(8,202)	-	-	-	-65	-	(223)	-11	-
Borrowings	(275,693)	(39,927)	-5,395	-4,234	-	-	-	-	-	(269)
	(824,455)	46,008)	(5,395)	(4,234)	-	(55)	-	(223)	(11)	(269)

2016-in thousands	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Account receivable	624,240	-	-	-	-	-	-	-	-	-
Cash and Bank balances	47,647	8,486	-	-	-	22.00	-	-	-	-
Investments	25,193	-	-	-	-	-	-	-	-	-
Account payables	(934,369)	(12,412)	-	-	(179)	(3,817)	(1,365)	(949)	(11,928)	-
Borrowings	(717,391)	(31,705)	(13,592)	(4,234)	-	-	-	-	-	(269)
	(954,680)	(35,631)	(13,592)	(4,234)	(179)	(3,795)	(1,365)	(949)	(11,928)	(269)

December 2017	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	4.4142	5.2741	6.5108	15.0782	4.5103	5.9359	0.5361	3.5044	6.2451	0.3586
Average rate	4.3505	4.8950	6.0330	14.4736	4.4125	5.5841	0.5074	3.3372	5.8754	0.3272

December 2016	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
Reporting date spot rate	4.1811	4.3813	5.717	13.9277	4.0846	5.1154	0.4587	3.0973	5.4457	0.3064
Average rate	3.9104	4.3188	5.4841	13.0756	3.9711	5.3001	0.4575	2.9543	5.4002	0.2672

Sensitivity

A 5% strengthening of the GH¢, as indicated below, against the currencies above at 31st December, 2017 would have increased (decreased) profit or loss and equity by the accounts shown below. This analysis is based on foreign currency exchange rate variances that the Authority considered to be reasonably possible at the end of the reporting period. The analysis assumes that all other variable, in particular interest rates, remain constant. The analysis is performed on the same basis for 2016, albeit that the reasonably possible foreign exchange rate variance were different, as indicated below:

Effect in thousands of GH¢

	USD	EUR	SDR	KD	CHF	GBP	SKR	CAD	ZAR	UA
2017	(181,965)	(12,133)	(1,756)	(3,192)	-	(16)	-	(39)	(5)	(3)
2016	199,581	7,806	3,885	2,948	37	971	31	147	3,248	4

A 5% weakening of the Ghana Cedi against the currencies above at 31st December 2017 would have had the equal but opposite effect on the amounts shown above.

(ii) Interest rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to the changes in market interest rates.

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Fixed Rate Instruments				
Financial Liabilities	1,088,536	1,021,059	1,088,536	1,021,059
Variable rate Instruments				
Financial Assets	112,044	123,962	1,208,210	972,801
Financial Liabilities	2,127,006	4,259,887	2,127,453	4,259,924

Fair value sensitivity analysis for fixed-rate instruments.

The group does not account for any fixed rate financial assets or financial liabilities at fair value through profit or loss. Therefore, a change in interest rate at the reporting date would not affect profit or loss.

Cash flow sensitivity analysis for variable-rate instruments.

A reasonably possible change of 10 basis points in interest rates at the reporting date would have increased (decreased) profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency exchange rates, remain constant.

	VRA		GROUP	
	10 bp increase	10 bp decrease	10 bp increase	10 bp decrease
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
31st December, 2017				
Financial Liabilities	(1,089)	1,089	(1,089)	1,089
31st December, 2016				
Variable rate instruments	(1,021)	1,021	(1,021)	1,021

Changes in market interest rates would not have any effect on equity

2a. Revenue

	VRA				GROUP			
	2017		2016		2017		2016	
	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000	GWh	GH¢'000
Sale of Electricity								
Electricity Company of Ghana	5,252	1,107,053	5,710	1,187,210	5,252	1,107,053	5,710	1,187,210
Mines	1,151	682,900	1,250	668,659	1,151	682,900	1,250	668,659
Akosombo Textiles	4	2,480	6	5,416	4	2,480	6	5,416
Aluworks	9	5,078	7	4,250	9	5,078	7	4,250
Diamond Cement	36	20,649	37	16,961	36	20,649	37	16,961
Volta Aluminium Co. Ltd.	631	153,269	617	135,087	631	153,269	617	135,087
Others	136	35,878	111	18,542	858	634,860	779	618,246
GRIDCo (Transmision Loss Recoveries)	593	177,511	618	128,837	593	177,511	618	128,837
Substation Use (GRIDCo.)	8	1,643	8	1,652	8	1,643	8	1,652
Northern Electircity Dept.(NED)	1,236	266,818	1,139	239,886	-	-	-	-
Local Customers	9,056	2,453,279	9,503	2,406,500	8,542	2,785,443	9,032	2,766,318
Communaute Electrique Du Benin	214	80,978	195	70,278	214	80,978	195	70,278
Compagne Ivoirienne d'Electricité	35	-	7	-	35	-	7	-
Société National d'Electricité Du Burkina	17	9,481	15	6,754	17	9,481	15	6,754
Sonable Youga Mines	40	22,356	40	19,888	40	22,356	40	19,888
Fee Zone Companies	157	66,708	108	58,856	157	66,708	108	58,856
Foreign Customers	463	179,523	365	155,776	463	179,523	365	155,776
Sale of Electricity	9,519	2,632,802	9,868	2,562,276	9,005	2,964,966	9,397	2,922,094
Ferry Services	-	-	-	-	-	13,581	-	8,379
Hospitality Services	-	-	-	-	-	3,203	-	3,887
Other Revenue Sources	-	-	-	-	-	16,784	-	12,266
Total	9,519	2,632,802	9,868	2,562,276	9,005	2,981,750	9,397	2,934,360

Continued

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

2b Other Operating income

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Real Estates	13,403	9,365	13,403	9,365
Health Services	19,514	12,503	19,514	12,503
Schools	11,403	9,794	11,403	9,794
Service Charge	41,705	47,293	41,705	47,293
Profit on Sale of Fixed Assets	(67)	536	(67)	488
Gas Sales Proceeds	17,891	6,029	17,891	6,029
Decrease in provision	232,570	-	250,901	-
Other Income	17,557	5,831	24,501	15,604
Total	353,976	91,351	379,251	101,076

2c Government of Ghana support on AMERI Shortfall

This relates to expected refund from the Government of Ghana on account of the AMERI tariff shortfall on the Build Own Operate Transfer (BOOT) arrangement between Government of Ghana and AMERI. The Ministry of Energy has confirmed that it would support VRA's application to the Ministry of Finance for the refund.

3 Cost of Sales/Operating Costs

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by budget center:	37,744	45,032	37,744	45,032
Generation: Hydro Thermal	1,219,268	1,317,520	1,205,391	1,317,520
Distribution(NEDCo)	-	-	238,720	191,162
Purchase of Electricity	884,573	1,108,373	879,835	1,108,373
Depreciation	339,570	221,556	720,037	316,887
Total	2,481,155	2,692,481	3,081,727	2,978,974
Analysis by budget Element:				
Salaries and Related Expenses	101,785	85,668	197,004	170,642
Materials and Spares Consumed	-	-	34,941	8,442
Repairs and Maintenance	97,272	70,395	108,697	78,343
Fuel Handling and Usage	995,025	1,068,070	981,148	1,068,070
Purchase of Electricity	884,573	1,108,373	879,835	1,114,199
Transmission Service Charge	-	-	69,113	63,660
Depreciation	339,570	221,556	720,037	316,887
Other Operating Costs	62,930	138,419	90,952	158,731
Total	2,481,155	2,692,481	3,081,727	2,978,974

4 Administrative Expenses

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by budget center:				
Central Services	227,860	539,049	273,542	639,950
Schools	24,068	20,604	28,946	20,604
Real Estates	54,667	50,896	54,667	50,896
Health Services	40,569	36,891	40,569	36,891
Depreciation	81,799	28,000	104,895	43,870
Total	428,963	675,440	502,619	792,211

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

4 Administrative Expenses

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Analysis by budget element:				
Salaries and Related Expenses	229,694	196,627	265,126	225,730
Material and Spare Consumed	-	-	4,295	3,092
Repairs & Maintenance	16,186	24,480	21,166	26,767
Other Administrative Cost	72,853	157,553	78,553	188,412
Depreciation	81,799	28,000	104,895	43,870
Employees Benefits	28,257	85,050	28,257	100,931
Audit Fees	174	450	327	665
Provision for Bad and Doubtful Debts	-	183,280	-	202,744
Total	428,963	675,440	502,619	792,211
Total Operating & Admin Cost	**2,910,118**	**3,367,921**	**3,584,346**	**3,771,185**

5a. Financial Income

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Interest & Investment Income	9,788	6,736	121,300	92,690
	9,788	6,736	121,300	92,690

5b. Gain on loan restructuring

In 2016 the year the Authority, through the Ministry of Fianance, restructured loan facilities with the following lenders:

Access Bank Limited

Fidelity Bank Ghana Limited

Stanbic Bank Ghana Limited

Unibank Ghana Limited

Universal Merchant Bank Limited

Zenith Bank Ghana Limited

Ecobank Ghana Limited

First Atlantic Bank Limited

GT Bank Ghana Limited

Standard Chartered Bank Ghana Limited

The restructuring resulted in significant modification to the loan facilities and a day one gain of GH¢75.18 million was recorded.

6 Financial Expenses

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Interest on Long Term Loans	5,647	5,293	5,647	5,293
Interest on Medium Term Loans	61,280	60,422	61,280	60,422
Interest on Short Term Loans	236,779	336,458	236,779	336,458
Finance Cost on Finance Lease	307,871	281,690	307,871	281,690
Finance Cost on Defined Benefit Obligations	18,893	19,885	26,637	23,449
Interest on Overdrafts	5	27,940	5	27,940
Interest on Delayed Invoices	141,290	108,363	141,290	108,363
Total	771,765	840,051	779,509	843,615

7 Taxation (Group)

The Authority is set up as a State-Owned Corporation and is not subject to corporate income tax. Its subsidiaries are however set up as profit making organizations and are therefore subject to corporate income tax. The tax position in the financial statements represent that of the subsidiaries of the Authority.

7a Income Tax Expense

Income tax expense recognized in profit or loss includes:

	GROUP 2017	GROUP 2016
	GH¢'000	GH¢'000
Current Tax Expense - Note 7 (b)	39,177	43,220
Deferred Tax Expense - Note 7 c.	104	-
	39,281	43,220

7b Current Tax

Movement in current tax balance are shown below:

2017	Bal at Jan 1	Payment	Charge for the year	Adjustment	Bal at Dec. 31
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Before 2015	31,946	-	-	-	31,946
2015	67,966	-	-	-	67,966
2016	43,130	-	-	-	43,130
2017	-	(73)	39,177	(1,034)	38,070
	143,042	(73)	39,177	(1,034)	181,112

2016	Bal at Jan 1	Payment	Charge for the year	Adjustment	Bal at Dec. 31
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Before 2015	31,100	(18)	-	864	31,946
2015	67,996	(30)	-	-	67,966
2016	-	(90)	43,220	-	43,130
	99,096	(138)	43,220	864	143,042

The Group does not have the right to offset tax assets and liabilities. The current tax balance is made up of:

	GROUP 2017	GROUP 2016
	GH¢'000	GH¢'000
Current Tax Payables	182,276	143,282
Current Tax receivable	(1,164)	(240)
Total	181,112	143,042

7c Deferred Tax

Movements in deferred taxes are shown below.

	GROUP 2017	GROUP 2016
	GH¢'000	GH¢'000
Balance at 1 January	170	170
Charged to profit or loss	104	-
Balance at 31st December	274	170

8a Capital Work- in-Progress

POWER

GROUP 2017	Generation Assets	Power Distribution Network	Others	Total
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2017	639,314	5,258	121,977	766,549
Additions during the year	154,051	27,729	45,179	226,959
Write off	-	(970)	-	(970.00)
Transfers	(54,458)	(15,704)	(26,703)	(96,865)
Balance as at Dec 31,2017	738,907	16,313	140,453	895,673
2016	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Balance as at Jan 1, 2016	1,097,413	529,827	71,850	1,699,090
Additions during the year	181,251	104,538	70,822	356,611
Write off	(15,579)	-	(273)	(15,852)
Transfers	(623,771)	(629,107)	(20,422)	(1,273,300)
Balance as at Dec 31,2016	639,314	5,258	121,977	766,549

VRA 2017	Generation Assets	Power Distribution Network	Others	Total
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance as at Jan 1, 2017	639,314	299	120,102	759,715
Additions during the year	154,051	1,395	45,179	200,625
Write off	-	-	(970)	(970)
Transfers	(54,458)	(1,395)	(26,703)	(82,556)
Transfer to PROPCo	-	-	(42,783)	(42,783)
Balance as at Dec 31,2017	738,907	299	94,825	834,031
2016	Ghc'000	Ghc'000	Ghc'000	Ghc'000
Balance as at Jan 1, 2016	1,097,413	528,898	69,992	1,696,303
Additions during the year	181,251	31,898	70,805	283,954
Write off	(15,579)	-	(273)	(15,852)
Transfers	(623,771)	(560,497)	(20,422)	(1,204,690)
Balance as at Dec 31,2016	639,314	299	120,102	759,715

In 2016 transfers from capital work-in-progress included:

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Transfers to Property, Plant and equipment	-	598,504	-	723,239
Transfers to NEDCo	-	56,125	-	-
Transfers to Ghana Grid Company(GRIDCo)	-	550,061	-	550,061
	-	1,204,690	-	1,273,300

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

As a result of the transfers to GRIDCo, the obligation for servicing loans contracted for the projects were also transferred to GRIDCo. The following are details of loans and completed projects transferred to GRIDCo.

Project	Loan
330 KV Aboadze-Volta Transmission Line	Kuwait Fund(657)
Ghana-Togo Benin Interconnection	African Development Fund 2100150014296
Power Systems Reinforcement Projects	AFD B-GEDAP
WAPP Coastal Transmission Backbone Phase 1	WB/IDA (CR 4092 GH)
WAPP Coastal Transmission Backbone Phase 2	WB/IDA(CR 4213 GH)

Others relate to all other classes of property, plant and equipment except generation assets and power distribution network They include building, townships and equipment.

8b Property, Plant and Equipment

On the 31st December 2016, the Group revalued its property, plant and equipment effective 31st December 2016.
The valuation was carried out by PricewaterhouseCoopers(PWC). The key methods used were current replacement cost and depreciated replacement cost. For some items, however, management indexation was used to determine fair values.

8b. Property, Plant and Equipment

GROUP 2017	Dam Power House and Civil Works Gh¢'000	Generating Plant & Machinery GH¢'000	Power Distribution Network Gh¢'000	Townships Gh¢'000	Building Gh¢'000	Floating Craft Gh¢'000	Motor Vehicles Gh¢'000	Equipment & Furniture Gh¢'000	Total Gh¢'000
Valuation									
Balance as at Jan 1,	6,504,783	4,868,092	2,932,299	498,772	421,983	350,649	130,105	49,277	15,755,960
Disposal	-	-	-	-	-	-	437	-	437
Revaluation surplus	3,163	52,427		4,871	3,569	18,040	1,216	13,373	96,659
Additions (including Transfers from CWIP)	509,851	321,293	231,049	38,993	38,778	(120,025)	6,242	(1,048)	1,025,133
Balance as at Jan 31st , 2017	7,017,797	5,241,812	3,163,348	542,636	464,330	248,664	138,000	61,602	16,878,189
Depreciation									
Balance as at Jan 1, 2017	3,436,446	1,838,235	1,724,930	130,889	38,673	181,397	80,025	30,575	7,461,170
Disposal/Transfers	-	-	-	-	-	-	(352)	-	(352)
Charge for the period	86,267	248,229	376,040	57,039	6,052	17,557	21,335	12,413	824,932
Revaluation Surplus	242,148	138,355	136,658	10,233	(2,216)	(109,443)	3,034	(3,411)	415,358
As at Dec 31, 2017	3,764,861	2,224,819	2,237,628	198,161	42,509	89,511	104,042	39,577	8,701,108
CARRYING AMOUNT									
As at Dec 31, 2017	3,252,936	3,016,993	925,720	344,475	421,821	159,153	33,958	22,025	8,177,081
Work-in-Progress as at Dec 31, 2017									895,673
(Note 8a)									9,072,754

8b. Property, Plant and Equipment

GROUP 2016	Dam Power House and Civil Works Gh¢'000	Generating Plant & Machinery GH¢'000	Power Distribution Network Gh¢'000	Townships Gh¢'000	Building Gh¢'000	Floating Craft Gh¢'000	Motor Vehicles Gh¢'000	Equipment & Furniture Gh¢'000	Total Gh¢'000
Valuation									
Balance as at Jan 1,	6,381,269	3,539,807	2,734,769	531,448	399,996	267,060	154,988	54,581	14,063,918
Disposal	-	(347,934)	-	(153)	(259)	-	(59,304)	(13,088)	(420,738)
Revaluation surplus	110,234	139,444	120,995	(35,892)	21,361	68,535	31,799	4,772	461,248
Additions (including Transfers from CWIP)	13,280	1,536,775	76,535	3,369	885	15,054	2,622	3,012	1,651,532
Balance as at Jan 31st, 2016	6,504,783	4,868,092	2,932,299	498,772	421,983	350,649	130,105	49,277	15,755,960
Depreciation									
Balance as at Jan 1, 2016	3,439,035	2,314,192	1,989,450	355,147	82,485	197,008	131,161	37,592	8,546,070
Disposal/Transfers	-	(346,325)	-	(108)	(133)	-	(59,295)	(13,084)	(418,945)
Charge for the period	60,874	160,682	95,531	8,182	3,335	6,899	15,506	9,748	360,757
Revaluation Surplus	(63,463)	(290,314)	(360,051)	(232,332)	(47,014)	(22,510)	(7,347)	(3,681)	**(1,026,712)**
As at Dec 31, 2016	3,436,446	1,838,235	1,724,930	130,889	38,673	181,397	80,025	30,575	7,461,170
CARRYING AMOUNT									
Balance as at Dec 31, 2017	3,068,337	3,029,857	1,207,369	367,883	383,310	169,252	50,080	18,702	8,294,790
Work-in-Progress as at Dec 31, 2016									766,549
(Note 8a)									9,061,339

8b. Property, Plant and Equipment

VRA 2017	Dam Power House and Civil Works Gh¢'000	Generating Plant & Machinery GH¢'000	Townships Gh¢'000	Building Gh¢'000	Floating Craft Gh¢'000	Motor Vehicles Gh¢'000	Equipment & Furniture Gh¢'000	Total Gh¢'000
VALUATION								
Balance as at Jan 1,	6,504,783	4,868,092	498,772	304,546	68,954	88,368	36,427	12,369,942
Transfer & Adjustments	-		-	(11,949)	-	-	-	(11,949)
Disposal	-	-	-	-	-	(437)	-	(437)
Revaluation surplus	509,851	321,293	38,993	23,808	5,390	6,908	2,618	908,861
Additions (including transfers from CWIP	3,163	52,427	4,871	2,554			205	63,220
Balance as at Jan 31st, 2017	**7,017,797**	**5,241,812**	**542,636**	**318,959**	**74,344**	**94,839**	**39,250**	**13,329,637**
Depreciation								
As At Jan 1, 2017	3,436,446	1,838,235	130,889	13,186	64,279	56,701	20,678	5,560,414
Disposal/Transfers	-	-	-	-	-	(352)	-	(352)
Charge for the period	86,267	248,229	57,039	3,506	3,763	13,394	9,172	421,369
Revaluation surplus	**242,148**	**138,355**	**10,233**	**1,030**	**2,216**	**4,431**	**1,443**	**399,856**
As at Dec 31, 2017	3,764,861	2,224,819	198,161	17,722	70,258	74,174	31,293	6,381,287
Carrying Amount								
Balance as at Dec. 31, 2017	**3,252,936**	**3,016,993**	**344,475**	**301,237**	**4,086**	**20,665**	**7,957**	**6,948,350**
Work-in-Progress as at Dec 31, 2016								**834,031**
(Note 8a)								**7,782,381**

8b. Property, Plant and Equipment

VRA 2016	Dam Power House and Civil Works	Generating Plant & Machinery	Townships	Building	Floating Craft	Motor Vehicles	Equipment & Furniture	Total
	Gh¢'000	GH¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000	Gh¢'000
VALUATION								
Balance as at Jan 1,	6,381,269	3,539,807	531,448	305,719	89,009	122,856	43,785	11,013,893
Disposal	-	(347,934)	(153)	-	-	(55,778)	(12,254)	(416,119)
Revaluation Surplus	110,234	139,444	(35,892)	(1,778)	(20,055)	18,658	4,593	215,204
Additions (including transfers from CWIP)	13,280	1,536,775	3,369	605	-	2,632	303	1,556,964
Balance as at Jan 31st , 2016	**6,504,783**	**4,868,092**	**498,772**	**304,546**	**68,954**	**88,368**	**36,427**	**12,369,942**
DEPRECIATION								
As at Jan. 1, 2016	3,439,035	2,314,192	355,147	59,709	85,989	108,263	29,715	6,392,050
Disposal/Transfers	-	(346,325)	(108)	-	-	(55,769)	(12,254)	(414,456)
Charge for the period	60874	160,682	8,182	1707	800	10,746	6,565	249,556
Revaluation surplus	**(63,463)**	(290,314)	(232,332)	(48,230)	(22,510)	(6,539)	(3,349)	(666,736)
As at Dec 31, 2016	**3,436,446**	**1,838,235**	**130,889**	**13,186**	**64,279**	**56,701**	**20,677**	**5,560,414**
CARRYING AMOUNT								
Balance as at Dec 31, 2016	**3,068,337**	**3,029,857**	**367,883**	**291360**	**4,675**	**31,667**	**15,749**	**6,809,528**
								759,715
Work-in-Progress as at Dec 31, 2016								**7,569,243**
(Note 8a)								

Continued

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

Property, Plant and equipment-continued

The net carrying amount of generating plant and machinery acquired under finance leases at the end of the year was Gh¢ 914.73 million

There were no restrictions on the Group's title to items of property, plant and equipment at the end of the year.

No equipment had been pledged as security for liabilities.

8c Disposal of Property, Plant and Equipment

6 Financial Expenses

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Cost	437	416,119	437	420,738
Accumulated Deprecation	(352)	(414,456)	(352)	(418,945)
Carrying amount	85	1,663	85	1,793
Revaluation on disposed assets	-	-	-	-
Net Carrying Amount	85	1,663	85	1,793
Proceeds from Disposal	18	2,199	18	2,281
Profit /(loss) on disposal	(67)	536	67	488
8d Intangible Assets				
Cost	-	-	71	71
Balance as at Jan 1	-	-	-	-
Additions	-	-	71	71
Balance as at Dec. 31				
Amortization	-	-		
Balance as at Jan 1	-	-	50	36
Charge for the year	-	-	12	14
Balance as at Dec 1			62	50
Carrying Amount	-	-	9	21
Investment in Subsidiaries	169,113	169,113	-	-
TAPCO (100% owned)	1,123	1,123	-	-
VLTC (100% owned)	5,625	5,625	-	-
AHL (100% owned)	200,000	200,000		
NEDCo (100 %)	52,294	-	-	-
PROPCO	428,155	375,861	-	-

All the subsidiaries are incorporated in the Republic of Ghana.

Equity-accounted investees

The value of equity-accounted investees are as follows:

Takoradi International Company (TICO)	-	72,871
	-	-
West African Gas Pipeline Company Limited (WAPCo)	-	72,871

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

10b Other Long Term Investments

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Fixed deposits with financial institutions	35,571	72,160	35,571	72,160
*Loans		-	1,000,207	800,328
	35,571	72,160	1,035,778	872,488

*Loans related to an unsecured loan advanced by the Group to TICO, as associate. The Group has applied its share of the losses of TICO in excess of its equity investments in TICO to the value of the investment.

11 Inventories

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Inventory and spare parts	87,777	57,917	113,824	61,648
Write down for obsolescence	-	-	(74)	(74)
	87,777	57,917	113,750	61,574
Fuel for Thermal Plant	196,199	179,163	196,199	179,163
	283,976	237,080	309,949	240,737

12 Trade and other Receivables

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Trade and Other Receivables	2,898,372	2,891,796	3,774,139	3,532,271
Impairment loss allowance	(280,751)	(513,321)	(296,001)	(546,929)
	2,617,621	2,378,475	3,478,138	2,985,342
Prepayments	50,185	93,632	55,203	103,736
Amounts due from related parties	558,948	458,936	-	-
Amount due from Government of Ghana in respect of the AMERI transaction - Note 2(c)	1,196,581	545,428	1,196,581	545,428
Other Receivables	841,283	894,132	1,039,845	1,021,965
Staff Advances	28,058	20,571	36,446	28,312
	5,292,676	4,391,174	5,806,213	4,684,783
Current	5,278,380	4,377,185	5,791,917	4,670,794
Non-current	14,296	13,989	14,296	13,989
	5,292,676	4,391,174	5,806,213	4,684,783

13 Short-term Investments

Short-term investments are made up of investments in Government of Ghana treasury bills and money market instruments held with financial institutions.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

14 Cash and Bank

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Foreign Currency	381,926	305,181	382,470	305,181
Local Currency	117,713	67,565	161,768	122,971
Cash on Hand	200	177	250	205
Cash and cash equivalents in the statement of financial position	499,839	372,923	544,488	428,357
Short term investments	48,414	-	121,882	40,770
Bank overdraft	(4,827)	(213,828)	(5,274)	(213,865)
Cash and cash equivalents in the statement of cash flows				
	543,426	159,095	661,096	255,262

*Short-term investment included as cash and cash equivalents in the Group's financial statements are investments in Government of Ghana treasury bills and other money market instruments with maturities of 3 months or less.

15 Payables

	VRA		GROUP	
	2017	2016	2017	2016
Current Portion	GH¢'000	GH¢'000	GH¢'000	GH¢'000
	4,743,409	3,964,831	4,983,922	4,033,092
Trade Payables	33,016	34,198	-	4,204
Amount due to related parties	268,830	238,432	275,840	247,251
Sundry Payables	25,025	889	25,428	1,451
Accruals	5,070,280	4,238,350	5,285,190	4,285,998
Non-Current Portion				
Other Payables	269,740	269,740	269,740	269,740
Total Payables	5,340,020	4,508,090	5,554,930	4,555,738

16a Borrowings

	VRA		GROUP	
	2017	2016	2017	2016
Current Portion	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Current portion of long and medium term loans	-	251,206	-	251,206
Finance lease obligations due within 1 year	414,387	204,309	414,387	204,309
Bank Overdrafts	4,827	213,828	5,274	213,865
Loan interest and commitment charges	227,457	274,149	227,457	274,149
Short-term borrowings	470,092	2,191,318	470,092	2,191,318
	1,116,763	3,134,810	1,117,210	3,134,847
Non-Current Portion				
Finance lease obligations due after 1 year	674,149	822,417	674,149	822,417
Loan due after one year but before five years	480,044	907,023	480,044	907,023
Loan due after five years but before ten years	944,586	323,266	944,586	323,266
Loan due after ten years	-	93,430	-	93,430
	2,098,779	2,146,136	2,098,779	2,146,136
Total Borrowing	3,215,542	5,280,946	3,215,989	5,280,983

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year

VRA	Balance as at 1-01-2017	Drawings	Repayments	HIPC Adjustment	Exchange Variation	Transfers	Balance as at 31-12-2017
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long Term Loans							
Kpong Hydro Project							
Kuwait Fund - 339	10,970	-	-	1,419	860	-	13,249
Kuwait Fund	289,385	-	-	-	16,134	-	305,519
Societe General - T3	47,995	-	-	(1,417)	3,763	-	50,341
IDA-4356-GEDAP	30,844	-	-	-	3,949	-	34,793
AFD(Akuse Retrofit)	174,931	-	-	-	35,647	-	210,578
KTPP-MRP	383,871	-	(74,802)	225	20,812	-	330,106
Subtotal: Long Term Loans	**937,996**	**-**	**(74,802)**	**227**	**81,165**	**-**	**944,586**
Medium Term Loans							
Afrexim 150m	373,193	-	(128,265)	-	19,924	-	264,852
Afrexim 75m	263,736	-	(62,876)	-	14,332	-	215,192
Subtotal: Medium Term Loan	**636,929**	**-**	**(191,141)**	**-**	**34,256**	**-**	**480,044**
Loans interest and commitment charges	274,149	-	(46,692)	-	-	-	227,457
Short Term Loans							
Ecobank	391,147	-	(408,269)	-	17,122	-	-
Standard Chartered Bank	299,882	-	(312,141)	-	12,259	-	-
Zenith Bank	117,131	-	(117,131)	-	-	-	-
Ghana International Bank	11,427	65,646	(15,483)	-	944	-	62,534
GT Bank	68,652	-	(71,885)	-	3,233	-	-
Ghana Commercial Bank	54,961	99,905	(155,567)	-	701	-	-
Sahara Energy Resources	352,805	-	-	-	19,669	-	372,474
Stanbic Bank	120,457	-	(120,457)	-	-	-	-
Barclays Bank		89,459	(90,803)		1,344		-
Cal Bank	-	46,091	(12,606)	-	1,599	-	35,084
UniBank	351,449	-	(358,165)	-	6,716	-	-
Fidelity Bank(USD)	33,683	-	(35,107)	-	1,424	-	-
Fidelity Bank(GH¢)	33,345	-	(33,345)	-	-	-	-
First Atlantic Bank(USD)	93,456	-	(110,309)	-	16,853	-	-
Universal Merchant Bank(GH¢)	107,054	-	(107,054)	-	-	-	-
Universal Merchant Bank(USD)	155,869	-	(162,462)	-	6,593	-	
Subtotal: Short Term Loans	**2,191,318**	**301,101**	**(2,110,784)**	**-**	**88,457**	**-**	**470,092**
Bank Overdrafts	**213,828**	**-**	**(209,001)**	**-**	**-**	**-**	**4,827**
Finance lease obligations - Note 16c	**1,026,726**	**307,871**	**(301,020)**	**-**	**54,959**	**-**	**1,088,536**
Total Borrowings	**5,280,946**	**608,972**	**(2,933,440)**	**227**	**258,837**	**-**	**3,215,542**

Continued

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

16b. Borrowings - Movement in loan balances

The following shows the movement in loan balances during the year

GROUP	Balance as at 1-01-2017	Drawings	Repayments	HIPC Loan	Exchange Variation	Transfers	Balance as at 31-12-2017
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long Term Loans **Kpong Hydro Project**							
Kuwait Fund - 339	10,970	-	-	1,419	860	-	13,249
Kuwait Fund	289,385	-	-	-	16,134	-	305,519
Societe General - T3	47,995	-	-	(1,417)	3,763	-	50,341
IDA-4356-GEDAP	30,844	-	-	-	3,949	-	34,793
AFD(Akuse Retrofit)	174,931	-	-	-	35,647	-	210,578
KTPP-MRP	383,871	-	(74,802)	225	20,812	-	330,106
Medium Term Loans	**937,996**	**-**	**(74,802)**	**227**	**81,165**	**-**	**944,586**
Afrexim 150m	373,193	-	(128,265)	-	19,924	-	264,852
Afrexim 75m	263,736	-	(62,876)	-	14,332	-	215,192
Subtotal: Medium Term Loan	**636,929**	**-**	**(191,141)**	**-**	**34,256**	**-**	**480,044**
Loans interest and commitment charges	**274,149**	**-**	**(46,692)**	**-**	**-**	**-**	**227,457**
Short Term Loans							
Ecobank	391,147	-	(408,269)	-	17,122	-	-
Standard Chartered Bank	299,882	-	(312,141)	-	12,259	-	-
Zenith Bank	117,131	-	(117,131)	-	-	-	-
Ghana International Bank	11,427	65,646	(15,483)	-	944	-	62,534
GT Bank	68,652	-	(71,885)	-	3,233	-	-
Ghana Commercial Bank	54,961	99,905	(155,567)	-	701	-	-
Sahara Energy Resources	352,805	-	-	-	19,669	-	372,474
Stanbic Bank	120,457	-	(120,457)	-	-	-	-
Barclays Bank		89,459	(90,803)		1,344		-
Cal Bank	-	46,091	(12,606)	-	1,599	-	35,084
UniBank	351,449	-	(358,165)	-	6,716	-	-
Fidelity Bank(USD)	33,683	-	(35,107)	-	1,424	-	-
Fidelity Bank(GH¢)	33,345	-	(33,345)	-	-	-	-
First Atlantic Bank(USD)	93,456	-	(110,309)	-	16,853	-	-
Universal Merchant Bank(GH¢)	107,054	-	(107,054)	-	-	-	-
Universal Merchant Bank(USD)	155,869	-	(162,462)	-	6,593	-	
Subtotal: Long Term Loans	**2,191,318**	**301,101**	**(2,110,784)**	**-**	**88,457**	**-**	**470,092**
Bank Overdrafts	**213,865**	**410**	**(209,001)**	**-**	**-**	**-**	**5,274**
Finance lease obligations - Note 16c	**1,026,726**	**307,871**	**(301,020)**	**-**	**54,959**	**-**	**1,088,536**
Total Borrowings	**5,280,983**	**609,382**	**(2,933,440)**	**227**	**258,837**	**-**	**3,215,989**

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

16b. Loan Terms

Details of the long term loans are shown below:

Loan	Currency	Contract Amount	Interest Rate	Maturity Date
KUWAIT 657	KD	5,000,000.00	3.50	2025
IDA 4092	SDR	26,500.000.00	4.50	2025
IDA 4213	SDR	30,800,000.00	4.50	2046
IDA 4356	SDR	5,436,657.53	5.30	2047
AfDB (GEDAP)	USD	20,000,000.00	0.75	2028
AfDB(WAPP	UA	14,870,000.00	0.75	2028
AFD(Kpong Retrofit Project)	EUR	50,000,000.00	1.99	2032
FIDELITY-KTPP-MRP	EUR	100,000,000.00	Libor+8.61	2022

16c. Finance Lease Obligations

Finance lease liabilities are payable as follows:

VRA	Minimum Less Payment		Interest		Present Value of Minimum Lease Payment	
	2017	2016	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	670,517	497,551	256,129	293,242	414,388	204,309
Between one and five years	938,018	1,314,956	263,869	492,539	674,148	822,41
	1,608,534	1,812,507	519,998	785,781	1,088,536	1,026,726

GROUP	Minimum Less Payment		Interest		Present Value of Minimum Lease Payment	
	2017	2016	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Less than one year	670,517	497,551	256,129	293,242	414,388	204,309
Between one and five years	938,018	1,314,956	263,869	492,539	674,148	822,417
	1,608,534	1,812,507	519,998	785,781	1,088,536	1,026,726

In 2016, the Government of Ghana entered into a Build Own Operate and Transfer (BOOT) arrangement with Africa and Middle East Resources Investment Group (AMERI Energy) LL C for the provision of a 250MW fast track power generation solution. The Government of Ghana assigned its rights under the arrangement to VRA. The Authority makes fixed capacity payment to AMERI in addition to a variable operating and maintenance charge. the Authority also bears the cost of gas supplied to AMERI for the production of power.

The Government of Ghana has the option to purchase the equipment for USD at the end of the lease term.

Management, having considered the requirements of IFRIC 4 and the substance of the arrangement in terms of the activities undertaken by the Authority, has evaluated the arrangement as constituting a finance lease.The imputed finance costs on the liability were determined based on the interest rate implicit in the lease.

17 Investment by the Republic of Ghana

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	495,449	495,449	495,449	495,449
Addition during the year	2,429,203	-	2,429,203	-
Balance at close of the year	**2,924,652**	**495,449**	**2,924,652**	**495,449**

18 The revaluation surplus arises as a result of revaluation of property, plant and equipment

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	4,495,064	4,502,991	5,818,463	5,231,192
Surplus for the year	509,005	881,940	610,632	1,487,960
Transfer	-	-	357,318	-
Transfer to Retained Earnings Account	(443,893)	**(889,867)**	(449,192)	(900,689)
Balance at close of the year	**4,560,176**	**4,495,064**	**6,337,221**	**5,818,463**

The revaluation surplus is not distributable to owners of the parent

19 Employee Benefits

A. Defined benefit obligations-schemes funded

VRA operates the following defined benefit schemes:

i Long- Services awards

This defined scheme entitles employees to a benefit package at the end of their service to the Authority. The benefit package is paid at the point of exit on a graduated scale based on the length of service ranging from 10 to 40 years.

ii. Severance benefit

This relates to rewards (package) paid to employees who attain certain milestone with the Authority and exit before their due date of retirement

iii Post-Retirement Medical Benefit

There is no contribution by the employee towards this benefit and no insurance scheme. The employer simply bears the medical costs (no cap defined) of the retiree and their spouse for as long as the retiree is alive. After the death of the retiree the spouse will be taken care of for 6 months after which they will be removed from the scheme.

The present value of the benefits at the end of the year are as shown below:

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Long-service award	33,575	19,889	48,792	28,828
Severance Benefit	16,064	14,596	21,513	19,012
Post-Retirement medical benefit	99,497	67,501	108,518	76,090
	149,136	**101,986**	**178,823**	**123,930**

B. Defined benefit obligations- movement in net defined benefit liability

The following tables show recompilations from the opening balances to the closing balances for the net defined benefit liability and its components of the various employee benefit schemes:

Long-service award

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	19,889	-	28,828	-
Included in profit or loss:				
Current service cost	1,628	1,009	2,389	1,443
Past service cost	-	11,516	4,998	16,252
Net interest	3,445	2,454	5,058	3,494
	5,073	**14,979**	**12,445**	**21,189**
Included in other comprehensive income:				
Actuarial loss (gain arising from):				
Actuarial loss (gain arising from)	-	-	-	-
Demographic Assumptions	365	205	365	268
Financial Assumptions	11,771	6,354	11,771	9,405
Other sources	12,136	6,559	12,136	9,673
Benefits paid	(3,523)	(1,649)	(4,617)	(2,034)
Balance at 31 December	**33,575**	**19,889**	48,792	**28,828**

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

Severance Benefit

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	14,596		19, 012	
Included in profit or loss:				
- Current service cost	816	605	1,097	802
- Past services cost	-	10,772	822	13,970
- Net interest	2,623	2,314	2,623	2,992
	3,439	13,691	4,542	17,764
Included in other comprehensive income: actuarial loss (gain arising from)			181	
- Demographic assumptions		-	-	-
- Financial assumptions	208	183	208	228
- Other sources	(346)	2,355	(346)	3,070
	(138)	2,538	43	3,298
Benefits paid	(1,833)	(1,633)	(2,084)	2,050
Balance at 31 December	**16,064**	**14,596**	**21,513**	**19,012**

Post-retirement medical benefit

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at 1 January	67,501	-	76,090	-
Included in profit or loss:				
- Current service cost	324	340	380	396
- Past services cost	-	65,729	-	73,913
- Net interest	12,825	15,117	14,267	16,963
	13,149	81,186	14,647	91,272
Included in other comprehensive income: actuarial loss (gain arising from)	-	-	(934)	-
Demographic assumptions	-	-	-	-
financial assumptions	427	175	427	173
Other sources	20,174	(12,221)	20,174	(13,595)
	20,601	12,046	19,667	(13,422)
Benefits paid	**(1,754)**	**(1,639)**	**(1,886)**	**(1,760)**
Balance at 31 December	**99,497**	**67,501**	**108,518**	**76,090**

Total

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'002	GH¢'000	GH¢'000
Balance at 1 January	101,986		123,930	
Included in profit or loss:	2,768	1,954	3,866	2,641
- Current service cost	-	88,017	5820	104,135
- Past services cost	18,893	19,885	21,948	23,449
- Net interest	21,661	109,856	31,634	130,225
Included in other comprehensive income:				
Actuarial loss (gain arising from)			(753)	
- Demographic assumptions	-	-	-	-
- Financial assumptions	1,000	563	1,000	669
- Other sources	31,599	(3,512)	31,599	(1,120)
	32,599	(2,949)	31,846	(451)
Benefits paid	(7,110)	(4,921)	(8,587)	(5,844)
Balance at 31 December	149,136	101,986	178,823	123,930

c. Defined benefits obligations-actuarial assumptions

The following are the principal assumptions at reporting date

	VRA		GROUP	
	2017	2016	2017	2016
Inflation rate	11.80%	20.00%	11.80%	20.00%
Discount rate	15.00%	19.00%	15.00%	19.00%
Nominal inflation gap	3.00%	3.00%	3.00%	3.00%
Net effective inflation gap	2.68%	2.59%	2.68%	2.59%
Retirement age	60 years	60 years	60 years	60 years

Mortality has been assumed to follow the mortality rates according to the A6-70 table. This assumption has remained unchanged for the previous valuation

20 Government Grant

These are grants in the form of crafts and other assets received by Volta Lake Transport Company Ltd from the Government of Ghana during the year to support the company's operations.

21 Debt contingency fund reserve

The debt contingency fund reserve was slashed by the Authority to enable the Authority meet its debt obligations during periods of operational difficulties. The fund is supported by investments in foreign currency money market instruments. At the end of every year, an amount(equal to the change in the value of the investments) is transferred from retained earrings to the debt contingency fund service.

Changes in the value of the investment are attributable to interest earned and foreign exchange gains/losses.

22 Other Reserves

Other reserves relate to exchange differences arising from the translation of the financial results of the Group's equity accounted investees into Ghana Cedis and the gains/losses on a flow hedge maintained by TICo.

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Balance at beginning of the year	-	-	18,173	18,173
Addition during the year	-	-	978	978
Balance at close of the year	-	-	19,151	19,151

23 Reconciliation of operating loss to operating cash flow

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'000	GH¢'000	GH¢'000
Loss after Tax	(430,544)	(1,319,682)	(605,630)	(1,223,938)
Adjustments for:				
Depreciation & amortization	421,369	249,556	824,932	360,771
Unrealized exchange loss	396,380	417,314	335,948	331,182
Profit on disposal of Property, Plant and Equipment	67	(536)	67	(488)
Finance Income	(9,788)	(6,736)	(106,111)	(92,690)
Finance expense	771,765	840,051	779,509	843,615
Capital Work-in-progress written off	-	15,852	-	15,852
Share of loss of equity accounted investees	-	-	-	17,181
Prior year adjustments	-		(14,836)	
Amortization of grant	-	-	(2,616)	(1,373)
Day 1 gains on restricting of loans	-	(75,179)	-	(75,179)
Tax Expense	-	-	38,709	43,220
	1,149,249	120,640	1,249,972	218,153
Changes in:				
- Inventories	(46,896)	4,593	(69,212)	30,066
- Receivables	(901,502)	(208,656)	(1,150,225)	(469,009)
- Payables	511,143	1,212,001	785,055	1,434,072
- Provisions and define benefits	47,150	85,050	47,150	104,496
Cash Generated from Operating activities	759,144	1,213,628	862,740	1,317,778
Tax paid		-	(73)	(138)
Interest paid	(46,692)	(516,584)	(46,692)	
Net cash from operating activities	712,452	697,044	815,975	801,056

24 Going concern consideration

The Authority recorded a net loss GH¢431 million for the year ended 31 December, 2017 (2016: GH¢1,319.68 million and as at the date, its current liabilities exceeded its current assets marginally by GH¢76 million (2016: GH¢2,354.74 million) indicating a signficant improvements.

The financial statements have accordingly been prepared on the basis of accounting policies applicable to a going-concern.

25 Contingent liabilities

The Authority is disputing interest on delayed invoices and other charges totaling GH¢12.98 million charged by one of its suppliers. As at the reporting date, the Authority had other legal cases pending judgment. The Directors believe that the outcome of these cases will be favorable to the Authority.

26 Capital commitments

The Group has a contract with Sachem Construction Ghana Limited for the engineering, procurement and construction of a single cycle power plant at Tema. The estimated value of works expected to complete the project at the end of the year is GH¢109.36 million.

The Group is committed to incur other capital expenditure of GH¢106.51 million

27 Related parties

Related party transactions

	VRA		GROUP	
	2017	2016	2017	2016
	GH¢'000	GH¢'002	GH¢'000	GH¢'000
Sale of Power				
NEDCo	266,818	239,886	266,818	239,886
Purchase of Power				
TICO	331,604	260,175	331,604	260,175

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