

VRA PRESS CONFERENCE HELD AT THE GHANA COLLEGE OF PHYSICIANS & SURGEONS

by Ing. I. Kirk Koffie
Deputy Chief Executive
(Engineering & Operations)



October 14, 2013

PRESENTATION OUTLINE

- Review of VRA Technical Performance
- Review of VRA Financial State
- Review of Tariff
- Ongoing Projects
- Issues



www.vra.com

Review of VRA Technical Performance

VRA HYDRO:

- VRA Hydro Power plants have always recorded availability beyond 94%
- VRA's hydro facilities at Akosombo and Akuse continue to register world-class performance with availabilities averaging 98% in the first half of 2013.
- According to the Electric Utility Cost Group ("EUCG"), VRA's Akosombo operations were in the World Top 5 in 2011 for its class of facility sized above 500 MW.

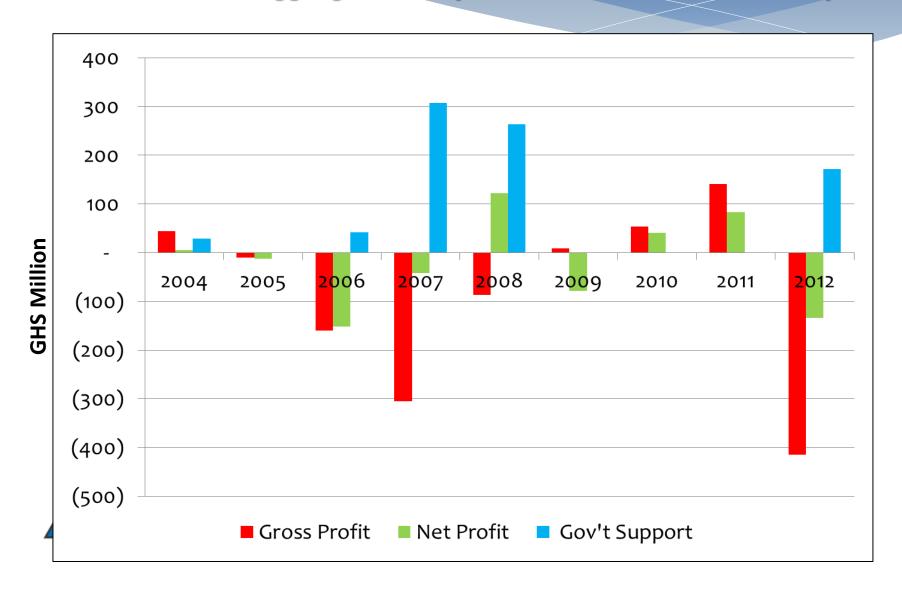
VRA THERMAL:

 In 2013 VRA thermal plant availabilities have been above 90% which is higher than the benchmark of 85%



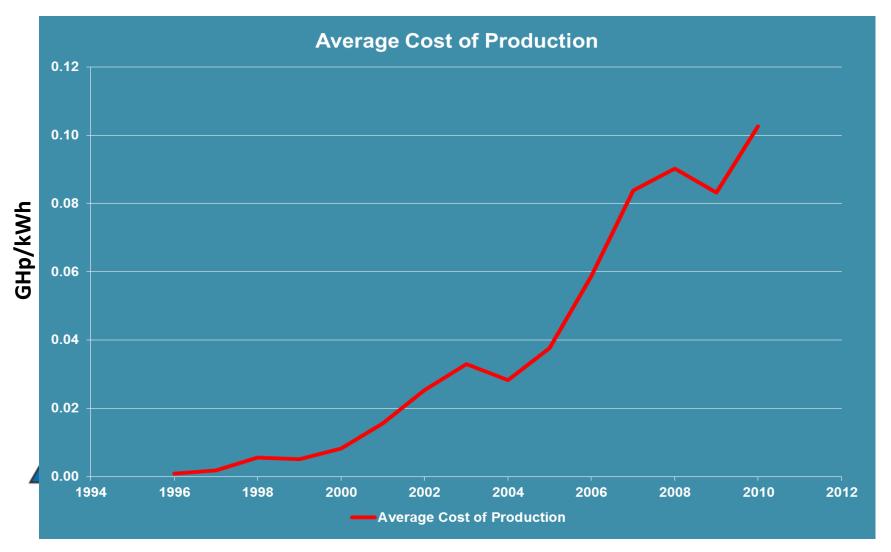
www.vra.com Review of VRA Financial State

VRA has been struggling financially because of below cost recovery tariff



www.vra.com Review of VRA Cost of Production

- Cost of Production keeps rising as the thermal component of the generation mix increases and consequently increases annual crude oil requirements
- Currently VRA's average cost of production is 19.29 GHp/kWh



www.vra.com

Review of VRA Tariff - 1

- Currently VRA's average cost of production is GHp19.29 /kWh and the approved tariff is GHp11.49 /kWh
- At the current tariff VRA's fuel cost alone cannot be covered. There is a deficit of about US\$ 200 Million. This excludes cost of maintenance, ongoing projects and other overhead costs
- The VRA's Bulk electricity tariff proposal submitted to the PURC was for a Bulk tariff increase from GHp8.4495/kWh to GHp19.29/kWh. This represents an increase of 128%.
- However, the new Bulk tariff approved by the PURC was from to GHp 8.4495/kWh to GHp11.4900/kWh, representing an increase of 35.98 % against our proposed increase of 128%.



Review of VRA Tariff - 2

- The tariff continues to favour the less advantaged: the first 50, and 150 units continue to be the cheapest tariffs, and still enjoy subsidies
- Most people use less than 300 units. In the NEDCo area, for instance, close to 80% use less than 300 units a month.
- To reduce the tariff increase actually benefits the large consumers, who use the most and can afford to pay.



Review of VRA Tariff - 3

A comparison of Average Costs and Tariffs granted



Ongoing Projects - 1

- Despite all these challenges VRA is pursuing a number of power generation projects to ensure that there is adequate generation capacity to meet the growing demand of the country
- Currently Ghana's demand is increasing at a rate where at least 150 MW 200 MW has to be added annually
- Some of the ongoing projects are as follows:
 - Kpong Retrofit project to extend the life of the plant by 30 years at a cost of Euros 42.75 Million
 - VRA/TICO 110 MW Expansion project to add steam turbine to reduce cost of production at a cost of over \$300 million
 - Kpone Thermal Power Project to add 220 MW generation capacity by end of 2014 or early 2015 at a cost of over US\$ 200 million
 - This project is being funded with VRA's internally generated funds and because of VRA's poor financial situation the project is experiencing challenges because of payment delays to the contractor



Ongoing Projects - 2

- Currently VRA is close to engaging an EPC Contractor for the construction of a 170 MW Thermal Power Plant at Takoradi called the T4 Thermal Power Plant. This project is estimated to cost over US\$ 200 million. After receiving the bids the true cost will be known
- VRA is working with CENIT to convert the existing TT1PP plant into a combined cycle plant by adding 110 MW capacity
- Contract has been awarded for Feasibility study for the development of a 48 MW Pwalugu hydro power plant on the White Volta River.
- VRA is also in the process of awarding a contract for the feasibility study for the development of 87 MW Juale hydropower project
- The VRA has awarded contract for the feasibility study for a 450 600 MW plant at Domunli in the Western Region



Ongoing Projects - 3

- VRA is also exploring solar and wind power generation as well as the
 development of some other hydro sites. Currently VRA is installing wind masts to
 enable wind measurements to be taken to enable a detailed feasibility study for a
 150 MW wind farm to be carried out.
- NATURAL GAS: VRA is also in constant discussion with gas suppliers in Ghana and Nigeria to secure adequate natural gas to improve reliability of supply and reduce the overall cost of electricity supply.
- We have led initiatives to explore the possibility of securing additional gas supplies through re-gasified Liquefied Natural Gas (LNG), imported from around the world

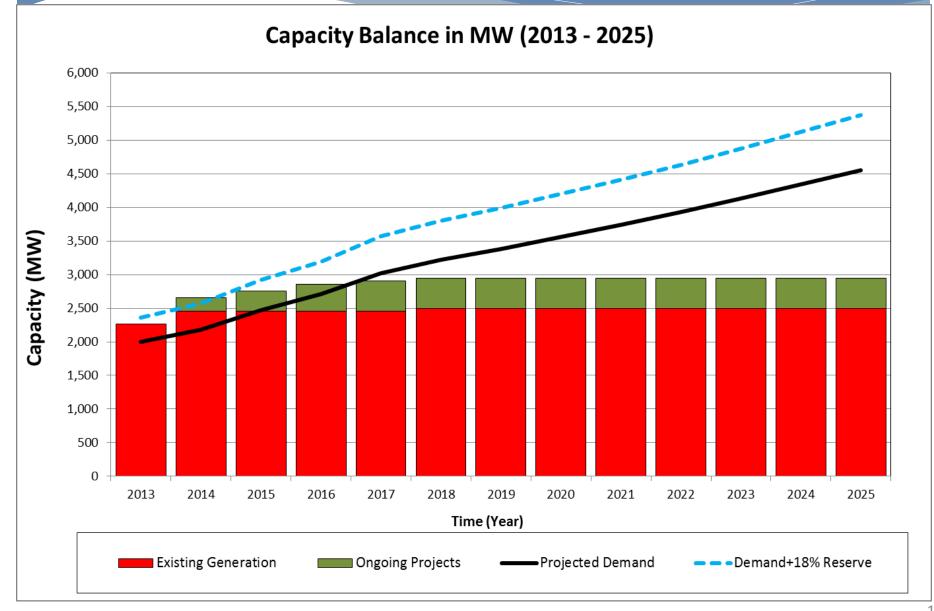


Issues: Demand/Supply Outlook

- Over the last 10 years, domestic demand for electricity has recorded an average annual growth of about 6.6%.
- Meanwhile within the last 5 years alone domestic electricity demand average annual growth rate of about 9.2% was recorded.
- Demand is growing at a rate where about 200 MW additional capacity is required annually. This has led to a situation where the generation capacity reserve of the power system has quickly been eroded within the last few years.
- Way Forward: embark on generation addition projects as is ongoing



Issues: Demand/Supply Outlook



Issues: Need for More Power Projects

- There is the need to continuously add on additional generation projects.
 VRA needs over 2 billion dollars to implement the power projects required over the next five years
- Without the right balance sheet VRA cannot raise money from banks to execute those projects
- The government also does not have the funds to execute those projects
- The private sector would also not invest if the tariff is not encouraging





Thank You

