Press Statement By Africa Centre For Energy Policy(ACEP) On Challenges Facing Ghana's Power Sector: The Load Shedding Politics

Dec. 5, 2013

1.0 INTRODUCTION

Ladies and Gentlemen of the Press, we have invited you today to discuss Challenges facing the power sector in Ghana and how to prevent the load shedding and to strategically position the country to achieve capacity long in the medium to long term .

ACEP is an independent group which provides informed analysis of energy policy options. We have been encouraged by the efforts made by various governments in Ghana to address the challenges facing our energy sector particularly power subsector. We took notice of the promise by our president that load shedding will end in 2013. Whilst this is commendable, we think that this should be backed by good analysis and technical advice. Our analysis has therefore been necessitated by the uninformed debate on the load shedding situation in the country in recent times.

Our analysis largely depend on the data analysis, the demand analysis and the demand forecasting by taking into consideration the various scenarios of supply.

2.0 BACKGROUND

Currently, Ghana's power sector policy is framed by the Power Sector Reform Programme initiated in the mid-nineties to address the problems of poor quality of supply, unreliable services, poor financial performance of the utilities as well as problems with raising financing for critical infrastructure projects. It was also precipitated in part by a policy shift by the World Bank not to provide any new concessionary loans for power system infrastructure development. Hence it was expected the Reform will create the enabling environment for attracting private investment to the power sector to replace governmental and multilateral sources of funding.

The recent energy crisis in the country brought to the fore how far we are from achieving the objective of providing reliable electricity supply to meet Ghana's developmental goals. The crisis exposed the fragility of our power sector and the fact that we are yet to overcome the fundamental problems that give rise to such recurrent power deficits.

3.0 THE POWER CRISES IN GHANA

The four major power crises in Ghana occurred during the periods 1982/83, 1997/98, 2002/3 and 2006/7. And now the fifth one in 2012. However, various governments have taken actions aimed at resolving the challenges in the power sector. This has become necessary because the effect f load shedding has serious implications for society's well being as a result of high cost f living associated with it. Today the Business community has resorted to procuring electric generators because they have lost confidence in the power generation system. The manufacturing sector is the hardest hit but Ghanaians are paying the price by consuming commodities at a relatively higher cost.

This is why we at ACEP think that the issues of power shortage should be discussed with some diligence and backed with relevant information. Our history has shown that from 1985 when the Ghana Generation Planning Study was completed, our country should have increased generation capacity by about 3000MW by the end of 2012; if we were adding about 300 MW of power every three years.

We appreciate the financing challenges for power projects leading to the development of the Ghana Power Sector Reforms. But once again, the implementation of the reforms has exposed our lack of political will and resolve to take the right decision. Even though the PURC was set up as part of the reforms, political interference has greatly affected the pricing reforms towards incentive tariffs which were required to attract investment. Another problem was the delay in establishing the transmission company until 2006 which was required to create a level playing field for IPPs to come in to the power sector.

We are encouraged however by the generation expansion programme started in 2007 following the power crisis of 2006/2007 with the Bui hydro electricity project, the Tema Thermal Plant 1 and 2, the Mine Reserve Plant , Sunon Asogli a Takoradi 3, kpone Thermal Plant and the reactivation of the Osagyego Barge. These projects were expected to add 1100MW of generation capacity to the grid. So far only 375MW has been added.

3.1 Is generation expansion the solution?

Generation expansion is very critical for generation reliability. However, we doubt our ability to sustain generation reliability in the short to medium term in spite of the generation expansion projects. Our base load, Akosombo and Kpong rely on water levels which have proven disappointing over the years and have caused us considerable distress during low levels of water. The Ghana Meteorological Agency has said that the water levels in Akosombo peaked in 2011 and is expected to start falling from 2012.

On the otherhand, most of our dual combined cycle plants or the single cycle plants rely on gas or the alternatively expensive light crude oil. VRA's finances continue to be troubled by the purchase of crude oil. The current load shedding has been attributed to gas shortage from Nigeria and if that is true, then the additional generation capacity will not provide the desired generation reliability. The current gas demand in Ghana is estimated at 200mmscfd which is way higher than the daily supply of 105mmscfd from Nigeria. The worse gas supply conditions are even more compounded

by internal conditions in Nigeria which is increasing its power generation from 6000MW to 13,000MW by end 2012.

Therefore, with the unreliable water and gas levels, we do not think load shedding will go away soon, at least not in the short to medium term.

3.2 Is LNG the solution?

The option for building an LNG vessel and regassification plant could provide an alternative source of gas supply. However, it will take three years to build the vessel which will not be available for the next three years if a decision is reached now. This requires an open access clause in our legal frameworks to allow for third parties through LNG supply arrangement to access existing pipelines. In the sales agreement of the West Africa Gas Pipe (WAGP), open access to the pipeline is supposed to have commenced in July 2012. This makes an LNG facility welcome.

Also curious is the terms under which an LNG vessel will be built. One important condition is security of supply through a long-term sales agreement to provide security against surplus gas from Sankofa if it comes on stream by 2017. Thus, the LNG option is faced with indecisions.

3.3 Is Jubilee gas the solution?

The current gas demand in Ghana is between 180-200 mmscfd. With the number of thermal power plants currently installed and expected to be in operation by 2015, the local demand is expected to ramp up to 280-300 mmscfd by 2015. With average monthly WAGP supply of 105mmscfd and Jubilee expected gas supply of 100mmscfd, total supply falls short of minimum demand beyond 2013. However if Sankofa comes on stream by 2017, Ghana will be able to meet its domestic requirement from domestic sources. In the medium term, Jubilee gas cannot sustain demand.

4.0 CONCLUSIONS

Generation reliability and transmission reliability must complement to solve the load shedding problems. Generation reliability is challenged by hydro and gas uncertainties. Based on the facts presented, we are confident to state that load shedding will not be over within the short to medium term.

Beyond the base load, the mid-merit and merit load is challenged by gas supply reliability from Nigeria because of her own generation expansion programme from 6000MW to 13000MW and then to 15000MW Jubilee gas is insufficient to meet current energy requirement until Sankofa comes on stream in 2017/18. An LNG will also take three years to build and even if a decision is taken, the need for supply security arises when Sankofa comes on with surplus gas.

5.0 RECOMMENDATIONS

To ensure coherence and efficiency in the development and implementation of generation projects, it is important to develop comprehensive procedures for the procurement of new capacity in a transparent and competitive manner.

We propose that the regulatory framework and the Power Sector Reforms should be implemented religiously to ensure investment security and acceptable level of returns for investment. We call on the PURC to move towards long-run marginal cost pricing for bulk supply tariffs. This will provide the incentive for investments in generation.

There should also be developed a framework for private sector investment in transmission infrastructure to reduce transmission losses from 4.9% and distribution losses from 20% to industry standards. Private sector participation in transmission management requires a change in the market structure.

In line with the Power Sector Reforms, GRIDCo should begin to play its role as owners of the national transmission facilities and hence the National Utility Transmission Company should be set up as system operator.

Demand side management (energy conservation) – appliance efficiency, load management (deciding on when to use certain appliances) is a possible option for Government to consider.