IN THE THIRD SESSION OF THE SIXTH PARLIAMENT OF THE FOURTH REPUBLIC OF GHANA

REPORT OF THE SELECT COMMITTEE ON MINES AND ENERGY

ON THE

PROJECT FOR THE INTERCONNECTION OF GHANA GAS TRANSMISSION SYSTEM WITH THE WEST AFRICAN GAS PIPELINE SYSTEM TO ENABLE THE REVERSE FLOW OF GAS FROM ABOADZE TO TEMA

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REPORT OF THE COMMITTEE ON MINES AND ENERGY ON TH E PROJECT FOR THE INTERCONNECTION OF THE GHANA GAS TRANSMISSION SYSTEM WITH THE WEST AFRICAN GAS PIPELINE SYSTEM TO ENABLE THE REVERSE FLOW OF GAS FROM ABOADZE TO TEMA

1.0 INTRODUCTION

The Project for the Interconnection of Ghana Gas Transmission System with the West African Gas Pipeline to enable Reverse Flow of Gas from Aboadze to Tema was laid in Parliament by the Hon. Minister for Petroleum, Hon. Emmanuel Armah-Kofi Buah on 27th October, 2015. The Paper was laid in accordance with the Treaty on the West African Gas Pipeline Project.

The Project was subsequently referred to the Committee on Mines and Energy by the Rt. Hon. Speaker for consideration and report pursuant to Order 188 of the Standing Orders of Parliament.

2.0 DELIBERATIONS

The Committee met with the Minister for Petroleum, Hon. Emmanuel Armah-Kofi Buah to consider the Reverse Flow Pipeline project.

The Committee is grateful to the Hon. Minister for his attendance and for providing clarifications on issues raised at the meeting.

3.0 REFERENCE DOCUMENTS

The Committee referred to the under-listed during its deliberations:

i. The 1992 Constitution of the Republic of Ghana;

ii. The Standing Orders of Parliament;

iii. The West African Pipeline Act, 2004 (Act 681);

iv. The Treaty on the West African Gas Pipeline Project between the Republic of Benin and the Republic of Ghana and Federal Republic of Nigeria and the Togolese Republic; and

v. The International Project Agreement between the Republic of Benin and the Republic of Ghana and the Federal Republic of Nigeria and

the Togolese Republic and the West African Gas Pipeline Company Limited.

4.0 BACKGROUND INFORMATION

As part of its strategies to maximize benefits from the country's Oil and Gas resources, the Government intends to harness and utilize indigenous gas as a catalyst for industrial development.

In line with this objective, the Government embarked on a Gas Infrastructure Project which involved the construction of offshore gas pipeline, a gas plant and an onshore pipeline. The first phase of the Project has been completed. The commissioning of the Gas Processing Plant at Atuabo and the 110 kilometer gas transmission pipeline from Atuabo to Aboadze to transmit Jubilee gas to VRA's power plants.

Despite the completion of the project, the country is yet to realize the full utilization of the gas due to the unavailability of some thermal plants at Aboadze to utilize all the gas from the Jubilee field. This has resulted to flaring of excess gas against the zero flaring policy of Government and the curtailment of oil production from the Jubilee field due to re-injection of the excess gas.

In responding to the challenge, the Government intends to use the West African Gas Pipeline (WAGP) to address the challenge within the short term. The WAGP has a designed capacity to transmit 460 million standard cubic feet of gas (mmscfd) at full pressure and a free flow capacity without compression of about 170 mmscfd. The current contracted volume for Ghana is 123 mmscfd. However, the actual volumes which have been supplied through the WAGP during the last two years have remained erratic and much below the contracted levels thereby creating room for the transmission of extra gas through the pipeline.

The transmission of additional gas through the WAGP however requires the construction a compressor to enable a reverse flow of gas from Takoradi to Tema.

Being a modification of the West Africa Gas Pipeline Agreement between the Government of Ghana and the West African Gas Pipeline Company (WAPCo), it therefore became imperative to lay the Project in Parliament for its approval.

5.0 DESCRIPTION OF THE PROJECT

The project involves the construction of a reverse flow pipeline to interconnect the Ghana Gas transmission pipeline system with the WAGP.

The WAGP facility together with piping modifications would be used for the regulation and metering the reverse flow of gas from Takoradi. As the WAGP does not have offshore isolating valves to separate any of its segments, it will operate as an integrated system and act as reservoir for gas volumes injected at Takoradi. The gas will be injected simultaneously at two points, Itoki and Takoradi and withdrawn at three points; Tema, Cotonou and Lome.

The design and construction of the interconnecting pipeline and piping modifications at the WAGP facility could be implemented within four (4) months.

6.0 OBSERVATIONS

The following observations were made by the Committee during its deliberations:

6.1 Cost of the Project

The Committee was informed that the construction of the reverse pipeline will be done at no cost to the Government of Ghana. The Minister for Petroleum stated that the West African Pipeline Company (WAPCo) has expressed willingness to finance the capital cost of the project which is estimated at Five Million, Four Hundred Thousand United States Dollars (US$5,400,000.00). The capital cost is to be recovered by the WAPCo through transportation charges.

6.2 Options for Transmitting Gas from Takoradi to Tema

The Committee was also informed that the Ministry of Petroleum considered two possible means of transmitting natural gas from Takoradi to Tema. The first option was to build a dedicated on-shore gas transmission pipeline from Takoradi to Tema at the estimated cost of Three Hundred and Fifty Million United States Dollars (US$350,000,000.00). The second option was to construct a reverse flow pipeline at Takoradi to transport the gas from Takoradi to Tema costing Five Million, Four Hundred Thousand United States Dollars (US$5,400,000.00). The Hon. Minister informed the Committee that the

Ministry opted for the second option for the short term on the account of the cheaper and quicker solution it presented; the fact that WAPCo pipeline is already in existence. For the long term however, the Minister hinted that a dedicated pipeline would be built for that purpose.

6.3 Maximizing the Country's Gas Potential

It was again noted that the execution of the Reverse Pipeline project would promote the optimal utilization of the country's natural gas resources for domestic consumption especially for power generation. The Committee noted that a temporary gas surplus has emerged at Aboadze due to the non-availability of some thermal plants in the power enclave. This is because while potentially 120 mmscfd of gas could be supplied from the Jubilee Field, supply has been restricted to 80 mmscfd, thereby creating a surplus of 40 mmscfd of gas. Additionally, the project takes account of gas expected from upcoming fields. The total of 50 mmscfd of gas is expected to be produced from the Tweneboa-Enyena-Ntomme (TEN) field in 2017 and an additional 180 mmscfd is expected to be produced from the Sankofa-Gye Nyame fields in 2018.

6.5 Commitment of the State under TEN Gas Sales Agreement

The Committee further noted that the completion of the project would enable the State meet its existing commitment under the Gas Sales Agreement with the TEN and Sankofa partners. A part of the terms of the Agreement, the State has committed itself to pay for available gas produced from the field whether the gas is utilized or not. Thus, the execution of the project is critical in mitigating this financial risk to the Ghana National Petroleum Corporation (GNPC), the national gas aggregator.

6.6 Arrangements for the Execution of the Project

The Committee finally was assured that the Ministry of Petroleum has put in place all the necessary mechanisms to ensure the timely completion of the project. As part of the plans for the project, the Committee was informed that a Gas Transportation Agreement (GTA) will be executed between the Ghana National Petroleum Corporation (the National Gas Aggregator)and the West African gas Pipeline Company (WAPCo).

7.0 CONCLUSION AND RECOMMENDATION

Having duly scrutinized the referral, the Committee is of the view that the execution of the project would help in addressing the current power supply

challenges facing the country. It would also reduce cost of power generation and improve the financial status of the power utility entities.

The Committee therefore recommends to the House to adopt its Report and to approve the Interconnection of the Ghana Gas Transmission System with the West African Gas Pipeline to enable Reverse Flow of Gas from Aboadze to Tema.

Respectfully submitted.

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CHAIRMAN, COMMITTEE ON
MINES AND ENERGY

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PEACE FIAWOYIFE (MS.)
CLERK TO THE COMMITTEE