Africa Centre for Energy Policy

REJOINDER TO GHANA NATIONAL GAS COMPANY (GNGC)

31st May 2020

ACEP's attention has been drawn to media publications of a response from Ghana National Gas Company (GNGC) on the Centre's "Analysis of the Proposal to Make Ghana National Gas Company (GNGC) The National Gas Aggregator" published on 21st May 2020. This response has neither been received officially nor published on the website of GNGC to give it any certified authenticity. However, based on the credibility of the media houses that carried the publication and the fact that it was widely circulated, it is appropriate the Centre responds to the issues raised by GNGC.

It is important to state that ACEP's analysis did not target the operational efficiency, which the Centre has a lot to say about, or the capacity of GNGC to deliver on its functions as is or hopes to be. The analysis was meant to highlight the challenges with the policy directive from the Presidency which GNGC happen to be the proponent of and the beneficiary of the policy change. In essence, the analysis was meant for the policy makers, and not an advocate of the policy. Therefore, if GNGC has a response, it should be directed at the policy makers. We look forward to a response from policy makers on the analysis of the issue and not from GNGC. Nonetheless, for academic purposes, ACEP would like to make comments on the response from GNGC.

GNGC's response shows that perhaps ACEP was consumed by charity in stating the facts as to why GNGC could not or should not be the gas aggregator in the interest of Ghana. Most of these facts in ACEP's analysis were avoided in GNGC's response. These facts are summarized below:

1. **Commercial Implications of the Policy**

Thus far, GNGC has shown considerable oblivion of the commercial issues in the gas value chain. In that regard, their analysis only accounts for role change and potential benefits to them and not the liabilities associated with being the gas aggregator. As a result, GNPC is seen as benefitting from a role that GNGC assumes is theirs. However, here are the facts on the associated liabilities:

i. **GNPC's equity investment in the OCTP project** – GNPC is not only a minority shareholder in the OCTP project as claimed by GNGC but has made critical investments which informed the economic viability of the project and the price of gas in the domestic market. The original gas price assumption of \$9.8/MMBtu accounts for GNPC's acquisition of additional interest of 5 percent of the project at the cost of US\$135 million. GNPC has paid this money with barrels of oil since production started in 2017. Again, to achieve the current commodity price of \$6.14/MMBtu, GNPC has waived the recovery of its gas related investment from the project as the gas aggregator. **GNGC must be prepared to absorb this cost and**

not assume that GNPC will grandfather the liabilities. GNGC has however failed to pay attention to this reality in their quest to become the gas aggregator.

ii. **US$100 million in escrow provided by GNPC for gas purchase** – GNPC is required by the OCTP development agreement to maintain a Reserve Escrow Account into which they deposited US$100 million. The US$ 100 million was swept by the OCTP partners in the first 3 months of gas production for non-payment of gas purchases by the value chain, including GNGC and the power sector, and this is yet to be recovered.

iii. **US$184 million financing of the Tema-Takoradi Interconnection Project (TTIP)** – This is a cost to GNPC as the gas aggregator and not the OCTP project, as claimed by GNGC. It is shocking that GNGC does not know this fact. GNPC negotiated with the OCTP partners to deliver the project on loan, separate from the OCTP project to avert an increase in the gas price which would have occasioned through the composite OCTP project financing. This debt currently sits on the books of GNPC with 2020 interest payments of US$11.69 million (Check GNPC 2020 Work Program submitted to Parliament). The repayment approach taken by GNPC is to sacrifice their barrels oil for the investment, of which US$56 million was made on behalf of GNGC. This is a commercial fact and should be known by an entity seeking to be the gas aggregator.

iv. The balance sheet for the novation of the relevant gas purchase agreements – The balance sheet of GNPC was the basis of political concession for GNPC to become the gas aggregator. This is why GNPC was required to provide the US$100 million in the Reserve Escrow Account for OCTP gas purchases. With the zero balance currently in the escrow account, there is pressure on GNPC from the partners to restore it. It is, therefore, a double agony for GNPC to recover their US$100 million from the value chain and to restore the escrow account. A company without sound balance sheet like GNGC cannot assume these risks.

2. **Integration of the oil and gas value chain –** ACEP's analysis did not suggest that there is no need for integration in the oil and gas value chain. Rather, it preferred a complete integration as proposed by the Gas Master Plan. This is also confirmed by the earlier examples (which they have now discarded) cited by GNGC in their proposal such as Gazprom, Nigerian National Petroleum Corporation (NNPC), and Petroleum Authority of Thailand (PTT). The fundamental disagreement between ACEP and GNGC is that, while GNGC wants an integration of just the midstream gas segment, ACEP and the Gas Master Plan (GMP) prefer an integration of the entire oil and gas sector. This is informed by two important parameters: the context that made GNPC the aggregator and the size of the industry. A simple analogy to this point is that, if you have a fishpond, a family can manage it, but if you have an ocean, you will require concessions to optimally harness its resources. Ghana's gas industry is nascent and akin to a fishpond. That is why the GMP recommends the Turkish model which followed the same proposal with the national oil company as the anchor, with subsidiaries along the value chain. This has been interpreted to mean something else by GNGC.

3. **GNGC has known no financial risks** – GNGC's craving is informed by the fact that they have known no financial risks. As a gas processing and transmission company, GNGC does not own the commodity; they are paid for services delivered: processing and transmission. However, because they process the gas, they have over the years encumbered the liquids (LPG and condensate) and lean gas consumed by non-power users without accountability. All the processed gas and its products belong to GNPC and should be accounted for as part of gas revenues. **ACEP estimates that revenues from LPG alone amounts to about US$7.7 million a month.** Various attempts by the Ministry of Finance since 2015 to exact accountability from GNGC for this revenue have yielded no results. This defect of not accounting for the revenues they receive has been repeated in the cash waterfall mechanism which has been institutionalized recently. Therefore, GNGC only enjoys revenues and assumes no risks. The situation is not the same as the gas aggregator; it comes with enormous responsibility.

The summary of ACEP's position is that Ghana's oil and gas sector is too small to have many independent national players. In fact, the existence of GNGC as an independent company, as shown in ACEP's earlier analysis, is a product of politics and not an optimal option for Ghana's nascent oil industry. This is what the contextual realities and the Gas Master Plan sought to correct by making GNGC a subsidiary of GNPC.

Besides the key points written above, ACEP now proceeds to comment on the specific responses by GNGC in our analysis. **GNGC's unedited responses are quoted first and followed by ACEP'S comments in red;**

GNGC's RESPONSE TO ACEP

We refer to the publication by ACEP on 23 May 2020 criticizing the decision by the Presidency on the Institutional Roles Alignment in the Gas Sector.

When you read the header and indeed parts of the presentation, it seems like ACEP is arguing for restoration of GNPC's role as the Gas Aggregator, but eventually concludes with a recommendation that GNGC should be made a subsidiary of GNPC!! They rely on the Gas Master Plan and GNPC's "Balance Sheet" to support their recommendation.

ACEP's Comments: Beyond the speculations, the first time it officially came to ACEP's attention that GNGC was no longer a subsidiary of GNPC is in the former's proposal to the presidency to become a gas aggregator. This painted a trend: first, it was the rejection to be a subsidiary; currently, they want to be the gas aggregator; and the next demand can only be speculated. What is worrying is that it is only one company in an industry, which gets what it wants. This practice ignores the context that has defined the structures of the industry. Therefore, making significant changes cannot be a simple exercise of literature review at the expense of the context.

ACEP is a respected think-tank but this is certainly not their best presentation.

ACEP's Comments: This comment is fair from an entity whose policy proposal is under scrutiny. It is usual for entities not favored by ACEP's analysis to make these kinds of comments.

1.0 GENERAL COMMENTS

First of all, here are some general comments to note about the Gas Industry.

1. *The Gas Industry in Ghana is only 5 years old.*

ACEP's Comments: The gas processing from GNGC is five years old but the gas industry is older than that. Gas commercialization started with gas importation through the West Africa Gas Pipeline (WAGP) in a billion Dollar investment by four countries and oil majors.

2. *The life of a gas infrastructure project could be as long as 40 years, and this could be longer with prudent maintenance protocol. The EPC (Engineering, Procurement, Construction) & Financing phase may take only 2-4 years and the Operations and Maintenance phase, takes the remaining 36-38 years.*

3. *Ghana Gas' core business has three key components –Daily **Operations**, which takes about **80%** of the lifecycle time, periodic **Maintenance** which takes about **10%** of the time and occasional **Expansion** which takes the remaining **10%** of the life cycle time. **So Ghana Gas' key job description is to deliver gas for Power generation for Ghanaians, through reliable and uninterrupted operations.** Not necessarily expansion projects.*

ACEP's Comments: Points 2-3 speak to the same thing. Expansion of GNGC's infrastructure is key for the development of the gas sector. In their own proposal, GNGC acknowledges the need for cheaper gas from TEN and Jubilee fields. Without the required investments and expansion, it would be impossible to offtake this gas. Investments in and expansion of infrastructure, which GNGC maintains that it constitutes 10 percent of their core business, is what unlocks the potential of the daily operations and maintenance which takes 90 percent of the lifecycle of the processing plant. The assumption that investments and expansion of projects is not necessarily the core business of GNGC is coming from the mindset typical of state-financed entities and not from a growth and investments orientation.

4. *It is important **not** to base lasting policy decisions, including Institutional Arrangements, just on ability to Finance new facilities or expansion of existing ones or someone's Balance Sheet as suggested by ACEP.*

ACEP's Comments: It is also important to pay attention to risks that are necessary for investment attraction and long-term sustainability of the industry to avert the recurring financial burden on the state and the perpetual socialization of costs to consumers. Beyond this, ACEP is curious and wants to learn from GNGC, what the best indicator of the financial health of a company is other than its balance sheet.

5. *Ghana's Gas industry still riddled with legacy that; and Ghana Gas is owed the most by sister agencies. This is a very unusual circumstance by any standard. ACEP should be providing ideas to address this recurring legacy problem in the sector, instead of espousing short sighted band-aid solutions.*

ACEP's Comments: If GNGC cares to read, ACEP has extensively written on, commented and discussed the challenges of the value chain and has proposed forward looking solutions on the resolution of same. ACEP's website is referenced for this exercise.

6. *Gas Master Plans (GMPs) are meant to address two issues: Design Optimization and Operational Optimization. The current Gas Master Plan addresses only the former.*

Ghana Gas Team and their counterparts from Trinidad and Tobago have addressed the latter. Furthermore a GMP is also a working document, which requires regular update.

ACEP's Comments: It is interesting how GNGC now agrees that the design of the GMP is optimal. It is the same design that recommends GNGC as a subsidiary of GNPC which did not happen due to politics. For operational optimization of the design, it is the response of the institutions to their roles that optimizes the operation of the GMP. The refusal of GNGC to be a subsidiary of GNPC is a major hurdle to the operationalization of the GMP. Again, the GMP also had a model for operational optimization of the design which GNGC has failed to show an understanding or awareness of. If the assumption of GNGC on design optimization is just focused on the engineering of their plant, then the GMP is bigger than the gas processing plant.

2.0 History

Let's start with the historical context.

1. In **October 2014**, the then Minister of Finance, in his budget presentation to Parliament, announced the merger (marriage) of GNPC and GNGC. The primary reason presented by the Minister to Parliament was to enable GNGC use GNPC's balance sheet to facilitate access to capital for any future expansion of its facilities. The then Board Chair of GNGC, publicly denounced the merger and never signed off on it; and together with other board members resigned. This was over two years before the government change over in Dec 2016 and the completion of the Gas Master Plan-not 6 months.

Since the marriage of convenience, the primary objective of financial support was not realized; not even in the form of minor working capital. GNGC relied on its own Internally Generated Funds (IGF) for working capital and has been using different commercial vehicles to finance expansion projects. In effect, up to date, there has been no functional or financial relationship between GNPC and GNGC, to justify the merger.

ACEP's Comments: The announcement of the merger in the budget was part of the economic policy of Ghana for implementation in 2015. The operationalization of the merger delayed because the GMP could not be completed until December 2015 and later approved by cabinet in July 2016. This is the reason the merger could only be operationalized in July 2016. It is intriguing to note that an economic policy of Ghana agreed to by industry stakeholders will be referred to as a 'marriage of convenience' by GNGC. Thus far, it is only GNGC that has shown opposition to the policy that has received approval from all industry players. GNGC's position appears to be self-seeking rather than the pursuit of the national interest.

While GNGC argues in one breath that the merger did not happen, on another, they were expecting financial support from GNPC when they were busily opposing and resisting the economic policy directive. Again, it is fair for GNGC to recognize that the benevolence of GNPC for them to keep the liquids has sustained their operations at the cost to GNPC. Moreover, they yield that as recent as 2019, GNPC financed their share of the cost of TTIP to the tune of US$56 million. This is more than 'parental benevolence' which GNGC fails to acknowledge as financial support from GNPC.

2. Following the Minister of Finance's presentation to Parliament (in October 2014), the Minister of Energy, followed with a directive in **April 2015**, designating GNPC as the

Gas Sector **Aggregator**, in which capacity GNPC was to be *the sole buyer and seller* (and therefore the sole **Shipper**) of bulk natural gas, and was to enter into all upstream and downstream Agreements in the discharge of its duties. The Minister of Energy further directed that BOST be made the pipeline operator in the country, and was issued the license by the Energy Commission accordingly.

3. **So essentially, the then Minister of Finance made GNGC a subsidiary of GNPC in October 2014 ; and the then Minister of Energy made GNPC the Gas Aggregator in April 2015. All this happened before the Gas Master Plan was completed in December 2016.**

ACEP's Comments: This above point fails to recognize that the GMP was not an event but a crystallization of policy conversations on the sector which dates back to 2010 when Nexant was contracted by the Ministry of Energy to develop the "Advisory Paper – Ghana Gas Sector Master Plan". Subsequent to that, there were series of engagements and stakeholder consultations for agreements on policy direction which informed the GMP. Beyond this, the consummation of the OCTP agreement technically signed off GNPC as the gas aggregator.

3.0 SPECIFIC COMMENTS BY ACEP

Let's look at the specific issues raised by ACEP.

<u>3.1 Gas Commercialization</u>

Again we need to correct an impression created by ACEP. GNPC had the Gas Project from 2007-2011, through the change in Government.

GNGC picked it up the Gas Project in July of 2011 and had all the infrastructure mechanically completed in November, 2014; and fully commissioned in April, 2015.

It is also worth noting that the financing was provided by the **China Development Bank (CDB) facility and not GNPC's "parental benevolence."** Another point worthy of note is that the Jubilee partners provided "free gas" to help defray the cost of the installation of the gas infrastructure.

ACEP's Comments: GNGC should be fair to history. The establishment of GNGC in 2011 was a culmination of a political process between 2009 and 2011 including the setting up of a committee which recommended the establishment of GNGC. Beyond this, the financing for the gas processing plant has always been known to come from a CDB facility. The important point is that the CDB facility was an alternative to GNPC's financing model for the project.

Again, the delay in constructing the gas processing plants resulted in drilling of additional reinjection wells at the cost of US$100 million to GNPC and the Jubilee partners. Additionally, GNGC has encumbered all revenues from the liquids from the free gas and have not even used US$1 as contribution to the repayment of the CDB facility.

<u>3.2 GNPC has a Better Balance Sheet</u>

"..GNPC can use their Balance Sheet to Finance GNGC's Projects.."

This is not a good or sufficient reason for making GNGC a subsidiary of GNPC.

The fact is both GNGC and GNPC have one parent, the Government of Ghana (GoG). It is the GoG that affords both agencies the security for any financial transaction in the sector.

ACEP's Comments: Though both companies are "children of one parent" i.e. GoG, GNPC with all its challenges publicly accounts for its revenues from oil sales which gives it more credibility to engage investors. It is true that the Government of Ghana has supported the establishment and financing of GNPC's early days until they began commercial oil production. However, the Corporation has since oil production provided financial support for institutions of state and indeed government. This is based on the strength of the Corporation's balance sheet which GNGC discounts.

Here is a quote from GNPC to Parliament in its 2020 Work Program:
"Since 2010, Government has relied on GNPC to fund many activities in the energy sector on behalf of some state institutions. To date, nearly US$340 million which could have been in GNPC's cash reserves has been utilized for payments in favour of the following institutions as shown in Table 3 below:

No.	*Details*	*Amount (US$ million)*
1	*Ministry of Finance*	*50*
2	*Tema Oil Refinery Limited*	*58.4*
3	*Bulk Oil Storage & Transportation Company Limited*	*21.3*
4	*Electricity Company of Ghana Limited*	*12.9*
5	*OCTP Gas Reserve Escrow*	*100*
6	*Ghana National Gas Company*	*37.91*
7	*Gas Enclave Roads paid on behalf of Government*	*43*
8	*Heavy Fuel Oil Payments paid on behalf of Government*	*15.77*
	Total	***339.28***

"

It is also a fact that GNGC has received significant support from government. The construction of the gas processing plant in excess of US$1 billion is the single most expensive capital granted any state agency within three years of its establishment. **The least GNGC can do is to account for revenue from the sale of liquids and lean gas to non-power consumers.**

3.3 Gas Master Plan Recommendation

ACEP should consider checking the recommendations of the Gas Master Plan (2016) again. A gas masterplan is essentially a composite document which provides a roadmap for achieving the most cost-effective solution for **infrastructure design** (Design Optimization) based on gas supply and demand forecasts; and minimization of operating cost for operational planning (Operational Optimization).

It is indeed a working document which needs regular update as conditions, particularly the supply and demand forecasts change. The 4 year-old GMP is hardly fit for purpose and requires an update. For instance, none of the supply and demand data are applicable. The infrastructure plan is also obsolete, and needs revision. However, some of the recommendations and procedures are still worth considering. It will also require an expanded scope to include operational optimization.

Let's look at the exact wording of the current GMP with respect to Institutional Alignment as presented in the executive summary and detailed in section 7.2.1 of the body of the report.

The recommendation is simply to adopt the Turkish model of Botas Gas Company.

Here is how it reads.
*"It is recommended that the approach adopted in **Turkey**, which involved the petroleum pipeline company **Botaş**, a subsidiary of the state petroleum corporation TürkiyePetrolleriAnonimOrtaklığı, (TPAO) being the sole developer and operator of Turkey's*

gas transmission and distribution infrastructure, is also appropriate for Ghana's gas sector, at least at this early stage of development. ***Botaş*** *acted as* ***gas aggregator and wholesaler****, was the entity that invested in and operated an expanding national transmission and distribution pipeline system.*

In Ghana's case, this role ***can*** *be divided between GNPC and GNGC, whereby GNPC will be the aggregator and wholesaler of the gas and GNGC, as the wholly owned subsidiary of the GNPC, will be the owner and operator of the infrastructure……*

As the sector matures, the GoG may consider unbundling the services along the gas sector value chain".

Thus, contrary to the assertion made by ACEP, the recommendation of the GMP is mixed as indicated below:

a. *The GMP* ***recommends*** *the approach adopted in Turkey, where* ***Botas*** *is the sole infrastructure* ***<u>developer and operator</u>, <u>aggregator</u> and <u>wholesaler</u>****. This is an Integrated Operation.*
b. *But they go on to suggest that, in Ghana's case, we* ***<u>can</u>*** *unbundle these aggregated functions and divide them between GNPC and GNGC.* ***Reasons given: to improve sector co-ordination and facilitate investment and financing.***

So item (a) above clearly speaks to an integrated system as proposed by Ghana Gas. Item (b), however, speaks of a segregated system. ACEP's recommendation goes further; it is to go back to a subsidiary arrangement that the current government changed 3 years ago.

The reasons provided as noted above are two-fold: **improve sector co-ordination** and **facilitate investment.**

First of all**, the case for improved sector coordination envisaged** by the GMP, has not happened from an operations continuity viewpoint.

Let's look at a practical operational case which occurred on the **25th April, 2020**. There was an operational upset at ENI's Onshore Receiving Facility (ORF) in Sanzule. GNGC Operators, VRA Operators and ENI Operators were all in the operation zone in the western region but had to wait for GNPC's Commercial Manager to give approval from Accra, before the very important work of contiguous gas delivery for power generation could go on. This could have affected 60% of the country's power generation. That is hardly an efficient co-ordination.

The other reason of **investment facilitation**, has also not materialized for 5 years. So there is clearly no reason for a subsidiary arrangement, if even that was a valid criterion.

ACEP's Comments: This whole section is a clear misrepresentation of what the GMP proposed. Points (a) and (b) under this section are fabrications outside the GMP. The Botaş example is just what ACEP proposes; Botaş was established as a subsidiary of the Turkish national oil company. This is the model that was proposed by the GMP. Again, the GMP recognizes that no plan can accurately predict the future and therefore incorporates a modeling tool which allows for adjustment of the projections captured for scenario planning. It does not require a change of the fundamental mechanics of the document.

It is interesting to note that while GNGC has rejected the model proposed by the GMP, it is expecting to reap the benefits of the proposal as intended. Beyond the point that improved sector coordination can be realized with stakeholder engagements and not from GNGC becoming the gas aggregator, the refusal of GNGC to operationalize the proposal from the GMP is the reason the sector appears uncoordinated. The example cited by GNGC to show that the industry is not coordinated is, at best, petty. The unavailability of GNPC's Commercial Manager can be resolved by the parties in the sector, assuming it is even a fact. We are not sure GNGC will recommend becoming gas producer if Eni's Manager is not available at one point or becoming power producer if VRA's Manager is not available.

In response to GNGC's historical context above, the benevolence of GNPC in support of GNGC's operations have already been discussed.

3.4 OCTP Expansion of the Takoradi and Tema Regulating and Metering Facilities

The first phase of the Takoradi Tema Interconnection Project (TTIP) was completed in August 2018 and this allowed reverse transport of gas from Takoradi to Tema via WAPCo's system. The second phase, which expanded WAPCO's gas handling capacity in Tema is expected to be completed in June 2020. The project was pre-financed by the OCTP partners (where GNPC holds a minority stake) as part of the Sankofa project development cost, which ultimately is being paid through increased gas price by end-users. This was a condition precedent in the OCTP contract. The total project as at 30/3/2020 was $178m; $56M (**30%**) of which was expended on GNGC's facility in Aboadze. This is the extent of indirect contribution by GNPC to GNGC.

ACEP's Comments: For any lack of understanding of the project financing, GNGC should consult the Ministries of Energy and Finance. The project was financed on the books of GNPC as a loan to the Corporation. GNPC has a repayment plan through their share of oil to avert the cost being translated into higher gas price. The OCTP partners would not have given that loan on the books of GNGC because the latter cannot pay. As stated earlier the interest due for 2020 is US$11.69 million. Again, the value of the project is US$184 million, 30% of which is US$56 million.

3.5 Gas Price

The current ENI commodity price submitted by **GNPC and the Ministry** to PURC for computation of the Weighted Average Cost of Gas in the country is **$6.1408/MMBtu (**equivalent to **$31M/month,** for a supply of 170,000 MMBtu/d for 30 days), when it really should have been around **$9.59/MMBtu** (equivalent to **$49M/month,** for a supply of 170,000 MMBtu/d for 30 days). This means the **Ministry of Finance** has to make up the shortfall of about **$18M**/month for GNPC. Thus, even GNPC whose Balance Sheet ACEP is touting, has to seek financial rescue from the Ministry of Finance, every month.

ACEP's Comments: Hopefully, this is not the kind of computations that was used to convince government to issue the policy directive to make GNGC the gas aggregator. This is a misleading presentation of how the gas price was arrived at. The original gas price was US$9.8/MMBtu, and this has changed after the delivery of the project and further negotiations and concessions by government and GNPC. Here is a quote from the Minister of Energy at a Press Conference on 20th September 2018:

"The price of gas: The negotiated gas price was fixed at $9.8/mmBtu. Although a domestic gas, the price was higher than imported gas from Nigeria fixed at $8.4/mmBtu. The NPP government found this unacceptable and sought a renegotiation of the gas price on account of savings made from the project cost, initially estimated at $7 billion. I am happy to announce

that government has successfully renegotiated the headline gas price to $7.89/mmBtu. This gives the country and bulk gas customers a savings of $2 on every mmBtu of gas purchased which translates into several millions of United States Dollars."

The US$7.89/MMBtu stated in the above quote as the OCTP commodity price has further been reduced to US$6.14/MMBtu based on interventions from government and GNPC. It is important to highlight that GNPC and government have been working out an acceptable strategy to lessen the burden of gas price on the power sector and to a large extent on the economy. Central to that strategy is for both government and GNPC to waive their interest in the OCTP project (i.e. royalty and participating interest respectively). What the Ministry of Finance has been paying for is the cost of the commodity consumed by the power sector and GNGC for non-power consumers. Thus, those payments will still be borne by the Ministry of Finance as the guarantor of the consuming market irrespective of who is the gas aggregator. Part of the payments made by Ministry of Finance have been transferred into the books of ECG in the recently reconciled accounts between government and ECG. If GNGC pays part of the revenues collected to GNPC, that could reduce the monthly liability passed on to government. Even if government continues to waive its royalty, the implications of GNGC becoming the gas aggregator is that GNPC would keep their interests in the project resulting in an increased gas price.

3.6 Capacity to Manage Gas Projects

It is not clear which gas projects ACEP is referring to that GNPC has managed and acquired the requisite capacity. But certainly for Ghana Gas here is the list of Gas Projects managed:

Jubilee- Atuabo offshore gas gathering pipeline – This is a 12 inch diameter, 59 km offshore pipeline from the Jubilee oil& gas field's FPSO to the Atuabo Gas Processing Plant. The pipeline has a deep sea portion of 14km, and shallow water component of 45 km. This pipeline brings raw gas from the Jubilee field for processing onshore at the Atuabo Gas Processing Plant. Completed in 2013, the pipeline is owned and operated by the GNGC.

Atuabo Gas Processing Plant – the plant has a design capacity to process 150 mmscfd of raw gas, into lean gas, and Natural Gas Liquids (LPG and Condensate). The plant is owned and operated by the GNGC.

Atuabo – Aboadze onshore transmission pipeline – This is a 20-inch diameter, 110km onshore gas transmission pipeline to bring the lean sales gas from Atuabo to Power plants at Aboadze. This pipeline, completed in 2013, has a design capacity of 400 mmscfd. The pipeline is owned and operated by the GNGC.

Associated gas infrastructure for metering and distribution – this includes an Initial Station at Atuabo, a Distribution Station at Esiama (the start of the branch line to Prestea) and a regulating and metering station at Takoradi.

Essiama-Prestea lateral pipeline, regulating and metering station – this is a 20 inch diameter75 km long lateral pipeline connecting Essiama to Prestea.

Furthermore, since March 2017, Ghana Gas Engineers & Technicians assumed full operatorship of all the infrastructure, saving the country GHs 15M/month in operating cost..

ACEP's Comments: The context of ACEP's position is clear. The Centre supported the proposal to make GNGC a subsidiary because GNPC had the capacity to take on that responsibility. It was not the contemplation of the policy makers that GNPC would retrench staff and managers of the processing plant. Therefore, the list of projects listed by GNGC is a misunderstanding of the key point made in the analysis. We can highlight once more that GNPC has the balance sheet to raise finance for the second train of GNGC if the latter is made a subsidiary of the former.

3.7 Gas Processing Plant Expansion

ACEP also contends that the expansion of the Gas Processing Plant is 6 years behind schedule.

That simply cannot be possible. Even the **first plant**, currently in operation, was commissioned 5 years ago (April 2015). How can the second plant be 6 years late? Thus, ACEP expects the second plant to have been in service a year before the first!

ACEP's Comments: GNGC should pay attention and be fair to history. The second train was not envisioned after the first was completed. The reason the existing processing plant is referred to as phase one means there was an anticipated second phase. It was always known that a second train was required to process the TEN gas in 2016. The original timelines for the first phase were to deliver the project in one and half years after financial close with CDB. Therefore, instead of December 2012[1] the project was delivered in November 2014 mechanically. At the same time government was looking for funding for the second phase to ensure timely delivery of the second train. It is alright to forget but do not blame it on ACEP.

4.0 Consistency with World Models

This is also misleading and we provide the National Gas Company of Trinidad as an example.

The fact is the National Gas Company of Trinidad and Tobago is **an integrated gas company** with **aggregation, shipping and operation** as core mandate. The processing function is performed separately by NGC's subsidiary, **Phoenix Park Gas Processing Ltd (PPGPL**), which concentrates on the separation and fractionation process. This is simply because the processing operation has grown very large and it makes sense to unbundle it from the Transportation unit. But it still remains a part of the national gas company, NGC. Indeed, PPGPL operation is 13 times bigger than that of Ghana Gas, with capacities of 1950 MMscfd and 150 MMscfd respectively. That **clearly underscores**the point that you **bundle** the services (processing and transportation) when operations are small (typically in the early stages of operation for efficiency reasons), and you can **unbundle** when there is significant growth in operations.

The Trinidad Gas Model has been so successful that it has been the template for development for most emerging economies (not the Turkey model, as suggested in the GMP)

ACEP's Comments: The Turkish model of integration is what was agreed to by all stakeholders and approved by cabinet. As stated in our earlier comments above, GNGC is the only entity that has, till date, rejected the proposed model of the GMP. The Trinidad and Tobago model is again misinterpreted and ACEP stands by its position in the earlier analysis. In all its quest to be an integrated midstream gas company, GNGC has failed to accept that integrated oil and gas companies exist and that is what the GMP proposed while the industry is still very small.

---

[1] https://www.peacefmonline.com/pages/business/economy/201111/81060.php

Finally, we encourage ACEP to work with ALL stakeholders in the development of the gas sector and provide any meaningful suggestions they have to the appropriate ministry.

ACEP's Comments: This advice is well taken. In fact, this is all ACEP does: the Centre has engaged meaningfully with GNGC in the past and we appreciate its contribution to ACEP's work. This is only a case of divergence on national policy, which in ACEP's estimation is more costly to the ordinary Ghanaian. It is unfortunate we get attacks like this in our line of duty which potentially separate us from some key stakeholders. But honesty to the issues, not personalities, has sustained ACEP's work and we will continue to deliver on that.

Signed.

Benjamin Boakye
Executive Director, ACEP