The National Gas Company of Trinidad and Tobago Limited

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Natural Gas Supply Outlook for 2017 and Beyond

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Undeniably, 2016 proved to be a challenging year for the global energy sector with worldwide energy markets experiencing the disruptive effects of depressed commodity prices. Trinidad and Tobago's natural gas sector, was not spared the impact of global trends and its challenges were in fact compounded by ongoing gas curtailment issues. The situation of reduced natural gas supply to downstream consumers has been plaguing the local sector since 2010 and analyses of the current and predicted climate indicate that it will continue into 2017. As a result, securing the volumes required to maintain and support the demands of the industry remains a critical priority for NGC.

Optimizing existing gas supply

While bringing new gas reserves into production is key to stemming natural gas shortage, there also remains the issue of optimizing production from existing reserves. Crucial to this is the need to identify, reduce and eliminate bottlenecks in the upstream supply system where unplanned outages are of particular concern.

Supply shortfalls originate in the upstream sector, and NGC's response has always been to moderate the impact of curtailment on its customers. The company is working with suppliers to increase reliability and availability of the gas supply and reduce the frequency and extent of unplanned outages. NGC will also continue to facilitate alignment between the upstream and downstream players and Atlantic LNG (ALNG) plants with regard to planned shutdown activity, so that reduced supply can be offset, as best as possible, by a reduced demand from downstream plants.

The Trinidad Onshore Compression (TROC) project, undertaken by bpTT, will also assist in optimizing the upstream gas delivery system. The project is designed to reduce the current gas supply shortfall within ALNG to allow them to meet contractual LNG export commitments.

Seeking new reserves

Short Term

As mentioned previously a major focus in the efforts to address gas curtailment is to bring new gas reserves into production in 2017 to meet existing upstream contractual obligations and to cover depletion. Two initiatives to do this include the development of the Sercan field and the Juniper Project.

The Sercan field is located in the East Manzanilla Joint Venture Development Block and is a joint development block between bpTT and EOG Resources. Sercan has the capacity to produce 250 mmscfd and first gas is expected by Q1 of 2017 and full project completion scheduled for Q2 2017.

Another project to address depletion is the coming on stream of bpTT's Juniper Project. This facility will take gas from the Corallita and Lantana fields located 80km off the south east coast of Trinidad. The completed facility will have a production capacity of approximately 590 mmscfd, thereby allowing bpTT to reduce its current shortfall of supply to the domestic market. bpTT has committed to delivering the first gas from this field by Q3 2017.

BHP Billiton has also sought to increase output from Angostura Phase III in an effort to meet the natural gas demands of the downstream sector. The development will not only upturn BHP's declining deliverability, but also has to potential to increase volumes the beyond the current required supply. Phase III is estimated to contain 500 bscf of recoverable natural gas reserves.

NGC is also in dialogue with Shell for increased domestic deliverability from existing fields through its production enhancement opportunities programme which should serve to mitigate some of the shortfall which accrued as a result of the Starfish project. This is part of NGC's game plan to examine a number of solutions to impact positively on the shortfall in 2017.

Medium Term

Developing small and marginal gas fields is one of the strategies for alleviating gas shortage in the medium term. While the Ministry of Energy and Energy Industries manages the process of engaging smaller, independent operators to extract this class of reserves, NGC concomitantly will seek opportunities to partner with the Ministry in an effort to increase gas production to supplement to current tight supply. NGC is moving towards entering such a partnership with DeNovo Energy Limited.

DeNovo acquired 80% ownership of Blocks 1a and 1b and the remaining 20% is currently owned by the state oil company, Petrotrin. NGC is now finalizing an agreement to acquire Petrotrin's share in the blocks. Once the partnership between NGC and DeNovo is formalized, NGC will have a 20% stake in all natural gas produced from DeNovo's development of the gas fields. The first phase of development is concentrated in the Iguana field where reserves are estimated at 200 bcf of natural gas with an 80 mmscfd rate of production. First gas is expected in Q1 2018.

Long Term

As part of NGC's long term strategy to ensure security of natural gas supply through direct upstream participation and transportation, the Company is looking beyond the borders of Trinidad and Tobago and specifically to our South American neighbour, Venezuela. An agreement finalized between the two Governments in December 2016 centers around the development of the Dragon field to create an across-border natural gas supply for Trinidad. Both countries will take responsibility to operationalise the plan to extract and monetise the gas from Dragon through their key State organizations, The National Gas Company of Trinidad and Tobago Limited (NGC) and PDVSA (the Venezuelan state oil and gas company). SHELL has also been invited to participate in this opportunity. In the first phase, the gas is expected to flow to Trinidad and Tobago from the Dragon field, which will provide a supply of gas for both LNG and the petrochemical sector.

Unlike the Dragon field which lies entirely within Venezuela's maritime jurisdiction, the Loran-Manatee field straddles the maritime border between Trinidad and Venezuela. This field is believed to contain 10 tcf of gas, with approximately 27% of the field in Trinidad and Tobago's maritime territory. The monetisation of this field can potentially add 2.69 tcf of gas to local supply. Moreover, the Venezuelan government has expressed willingness to send a portion of its gas to Trinidad for processing as Liquefied Natural Gas, which will buoy the LNG industry, if realised.

Whilst still in early feasibility phase, the Company is currently exploring other avenues for the importation of gas to assist with ensuring security of supply for the local sector.

Optimistic Outlook

The industry is at a critical juncture and NGC has a realistic, but no less optimistic view that current gas curtailment will be reversed over the medium to long term. However, an increase in supply is not the only change to the industry to be expected. There is also the prospect that there will be an increase in gas prices, primarily driven by higher upstream cost of production.

Key lessons from past adversities both locally and globally are being applied. The local natural gas sector is poised for restructuring and growth, with the Government and NGC playing an integral role to realise the right balance between export and the domestic market in accordance with the Gas Master Plan. As NGC remains critical to the regulation and management of the natural gas sector as an aggregator and transporter, the Company is transforming its business model to pursue several opportunities for strategic partnerships across the entire energy value chain and maximize value of the country's resources for the benefit of Trinidad and Tobago.