

Senator the Honourable Franklin Khan

Minister of Energy and Energy Industries

Gas Sales Agreement Block 3A

July 21, 2020

Mrs. Penelope Bradshaw-Niles, Permanent Secretary (Ag), Ministry of Energy and Energy Industries

Mrs. Sandra Fraser, Deputy Permanent Secretary, Ministry of Energy and Energy Industries

Mr. Vincent Pereira, President BHP Trinidad

Mr. Conrad Enil, Chairman NGC Group of Companies

Mr. Mark Loquan, President National Gas Company

Ms. Arlene Chow, Chief Executive Officer, Heritage Petroleum Co. Ltd.

Media Personnel

Ladies and Gentlemen

Good morning. It is my pleasure to be here with my colleagues from the NGC, BHP, Heritage Petroleum and NGC E&P for the signing of the Gas Sales Contract for Block 3a.

This is indeed a momentous occasion and yet another step towards bolstering Trinidad and Tobago's hydrocarbon production and increasing our natural gas supply to the domestic market. This project is expected to boost our country's oil production by nearly 16,000 barrels per day (bpd) at its peak, and natural gas production by approximately 80 million standard cubic feet per day (MMscf).

On occasions such as today, it can be quite instructive to look back at the history of past agreements and reflect on how those have turned out. One such agreement is the Production Sharing Contract (PSC) for Block 2(c) that was executed in April 1996 with BHP and its partners.

Just over two decades ago, gas was discovered in the Angostura sand in Block 2(c). An oil discovery followed just a couple years later, and by January 2005, oil and natural gas were produced from the Angostura sand, with gas sales to the domestic market commencing in May 2011. To date there are seventeen (17) oil producers, seven (7) gas producers and seven (7) gas injectors in the Kairi, Canteen, Horst, Aripo and Angostura Fields. The Angostura development has been a fruitful one. Cumulative crude oil and condensate production to date has amounted to just over seventy-nine (79) million barrels.

In terms of gas production, in 2019, the Angostura development produced an average of 409 MMscf, with production reaching as high as 475 MMscf in June 2019. Since

gas production began, up until April 2020, the Angostura Field has produced a total of 1.71 Tcf of natural gas. The Angostura development sets the stage for the Ruby Project, which is the reason that we are all here today.

The Ruby Project has been a long-awaited development, as we have watched it move through the stages, from the signing of the PSC in 2002, to the market development phase that began in 2008, to the declaration of commerciality in 2018.

Block 3a, where the Ruby Project is located, has certainly come a long way since the PSC was executed in 2002. When this journey began, the initial parties to the contract were BHP Billiton (Trinidad-3A) Limited, BG Trinidad EC Limited, Talisman (Trinidad Block 3A) Limited and Elf Exploration Trinidad BV.

In January 2006, these initial partners collectively assigned 15% participating interest to Petrotrin, on a pro-rata basis. BG and Talisman later assigned their interests to Kerr-McGee TT E&P Limited (Kerr-McGee) and Chaoyang Petroleum (Trinidad) Block 3A Limited respectively.

In 2013, the NGC Group made a major upstream investment when NGC E&P Netherlands Cooperatief U.A. acquired full ownership of Elf, and in October of that same year, Elf changed its name to NGC E&P (Netherlands) B.V. (NGC).

In May 2017, Kerr-McGee effectively assigned its participating interest on a pro rata basis to BHP, NGC, Chaoyang and Petrotrin.

In December 2018, Petrotrin's assets were transferred to Heritage Petroleum Company Limited (Heritage) inclusive of its interest in Block 3(a). Also, in

December 2018, Chaoyang elected not to participate in the development of Block 3(a) and BHP assumed their entire participating interest in the development. Thus, the participating interest in Block 3(a) is now shared amongst BHP, with 68.46%, Heritage, with 20.13%, and NGC E&P, with 11.41%.

BHP is the only party remaining of the four initial parties who were awarded the PSC for Block 3(a). I remember in 2015, Vincent Pereira spoke about the complexity of the area in which the Ruby Project is located. He noted that Ruby 1 was probably the best well that BHP ever drilled, and then they drilled Ruby 2 next to it, which ended up being a dry hole. I will tell Vincent today, as an Exploration Geologist myself – Welcome To T&T, the graveyard of geologist. But it is this complex geological setting in which we are located (at the margin of the Caribbean and Southern America Plate) that we have been able to continually find hydrocarbon reserves for over 100 years. If the geology was simple we would have exhausted our resources decades ago. This speaks to the risk that upstream companies take, and the need for strong technical teams who have an intimate understanding of the area and the geology at work.

Fortunately, BHP did not shy away from the complexity of Block 3(a). I think I can safely say that we were all thrilled to hear in August 2019, that the BHP Board had approved the US\$283M in funding to develop the Ruby Project. When all is said and done, BHP would have spent at least US\$0.5Bn on this project, which is no small amount.

The development of BHP's resource in the Ruby and Delaware fields, which are located to the east of BHP's producing asset in Block 2(c), is strategic and will provide mutual benefit to the assets in both blocks. The Ruby Project's proposed

five production wells and one injection well will be tied back to the existing facilities in the Angostura development, sharing separation and compression capacity. This, in turn, will extend the life of the Angostura asset and delay field abandonment. BHP has truly done a remarkable job of maximizing the value of its existing asset in Block 2(c).

The development of the Ruby Project will also bring welcomed work for local energy services companies, and local entities of multinational companies, with 100% of the brownfield scope of work being awarded locally.

We look forward to first production in 2021 and the additional 16,000 bpd and 80 MMscf of natural gas that the Ruby project will add to T&T's supply 16,000 bpd is nothing to take lightly. The last major oil discovery was Angostura in 2005 and before that was TSP in the 1970's. Angostura peaked at 50-60,000 bpd and TSP at 150,000 bpd. A unique trend is starting to develop:

- We are finding oil off the East and North East Coast
- We are finding gas in onshore Trinidad

Not taking from BHP thunder it will be remiss of me as Energy Minister, not to refer to another piece of good news.

Touchstone's announcement of its Independent Audit Reserves Report by GLJ Limited.

- *398 Bcf Gas in Place*
- *Estimated peak production of 100 MMscf and 1000 bbl of Condensate.*

This all means one thing. The Basin Is Still Prospective.

Looking ahead beyond the Ruby Project, BHP's future in Trinidad appears bright, as it may begin to reap the rewards of the commitment of significant resources to Deepwater exploration in T&T. BHP was awarded PSCs for nine (9) different blocks, namely TTDAAs 3, 5, 6, 7, 14, 28 and 29 and Blocks 23(a) and 23(b). Since then, BHP has relinquished four (4) of its Deepwater PSCs and now retains interest in TTDAAs 3, 5, 6 and 14, as well as Blocks 23(a).

Between March 2014 and February 2015, BHP collected just over 21,000km² of 3D seismic data over the Deep Atlantic Areas of the East Coast of T&T. This seismic data was acquired as two separate surveys, using the PGS' Ramform Titan and Ramform Atlas, which were the new multi-streamer survey vessels at the time.

BHP's four phase drilling campaign over the period 2016 to 2019 utilized the Transocean Deepwater Invictus Drillship, for the drilling of ten exploration wells. Of these ten wells, seven encountered natural gas bearing sands.

Ladies and gentlemen, it is my understanding that since the signing of the first PSC with BHP, to present date, BHP has invested more than US\$800M in deep-water exploration, in addition to other financial obligations over the period.

BHP's extensive deep-water exploration programme has already been of great value, both to BHP and to T&T. Exploration successes with Bongos and Victoria in the second phase of BHP's drilling campaign in 2018 were crucial to adding to the country's reserves. Deepwater oil leads identified in blocks operated by BHP have led to significant additions to our Prospective Resources.

And of course, I cannot speak of BHP's deep-water exploration success without mentioning the 3.5 Tcf of natural gas discovered in Blocks TTDA 14 and 23(a). We eagerly await the development of these discoveries and the valuable additions that it will make to our natural gas supply.

Ladies and gentlemen, as we return to the business of the Gas Sales Agreement (GSA) for Block 3(a), I must convey my appreciation to the NGC for the role that it plays and the work that it has done in negotiating a fair price for the gas that will be produced from the Ruby Project. It is certainly not an enviable or easy task to be the man in the middle, striving to ensure that both your upstream suppliers and downstream customers are satisfied, whilst also securing your own bottom line. As I said last year at a similar Term Sheet signing with Shell, and I will say again, the Government continues to endorse the role of the NGC as our country's sole natural gas aggregator.

I would also like to take this opportunity to thank BHP for its continued commitment to this country, from continued investment in exploration and development of our hydrocarbon resources, to providing support to our communities during the COVID-19 pandemic.

Once again, I wish to thank all parties involved, including members of the Heritage Petroleum Company Limited, and NGC E&P, for the roles that they played in helping us all to reach this milestone today. I wish you all great success in the execution of this momentous project.

Ladies and gentlemen, thank you.