

Government of the Republic of Trinidad and Tobago MINISTRY OF ENERGY AND ENERGY INDUSTRIES

FEATURE ADDRESS

 \mathbf{BY}

SENATOR THE HONOURABLE FRANKLIN KHAN

MINISTER OF ENERGY AND ENERGY INDUSTRIES

AT

THE PRESENTATION OF THE GAS AUDIT RESULTS FOR THE YEAR END 2019

AT

THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES

PORT-OF-SPAIN

ON

THURSDAY 21st JANUARY, 2021

11:00 AM

Salutations:

- Acting Permanent Secretary, Ministry of Energy and Energy Industries, Penelope Bradshaw-Niles
- 2. Deputy Permanent Secretary, Ministry of Energy and Energy Industries, Sandra Fraser
- 3. Other Executives at the MEEI
- 4. Executive Vice President, Ryder Scott Company, Herman Acuna
- 5. Members of the Media
- 6. Other invited Guests
- 7. Distinguished ladies and gentlemen

Good morning.

Welcome to the Results of the Annual Audit of the Non-Associated Natural Gas Reserves and Resources of Trinidad and Tobago for Year End 2019. This is the Ministry's second Audit Results Press Conference in five (5) months, the last one being the Results of Crude Oil Audit for Year End 2018. This is evidence of the Government's policy to maintain open channels of communication and to encourage the public to understand the Natural Resources that balance the high stakes gas supply and demand equation for the country.

The audit was conducted by the Ryder Scott Company, which began conducting Natural Gas Audits for and on behalf of the Government of Trinidad and Tobago beginning with the Year End 2000 Audit. Thereafter, Ryder Scott completed Audits annually till the 2019 Audit, with the exception of 2005. The current Cabinet approved contract with Ryder Scott Company was executed after a highly competitive tender process which selected the Company from a field of five (5) prestigious international petroleum consultants and is for audits covering the five (5) year period from year-end 2016 to 2020. The Year End 2019 audit is the fourth of the contract, and is the subject of this presentation.

The main objective of the Audit is to the provision of an <u>independent</u> certified statement of the country's natural gas Reserves and Resources in an internationally recognized reporting format.

I further emphasize here that Ryder Scott is an independent petroleum consultant and therefore has no vested interest in this country or its reserves, unlike an International Oil and Gas Company that must compete for project investments based on these reserves. In order for the results of the audit to hold any credibility, resource volumes must be assessed in accordance with industry standards. Ryder Scott uses

internationally recognized and accepted standards that have been set by the World Petroleum Council, the Society of Petroleum Engineers, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers. Thus, we can be assured that the detailed country report produced by Ryder Scott provides sound and well-founded data, which can be used as a basis for the development and shaping of national energy strategies.

The current international reserve standard, last revised in 2018, introduced the new terms Technically Recoverable Resources, as well as P1 + C1 Resources. I will use these terms from here on. Since we last presented to the nation on Gas Audits a little more than a year ago, the results of the current audit has boosted the trend of increasing Technically Recoverable Resources which started in 2017.

SLIDE 1

If we examine **Chart One** (1), which references Total Unrisked Technically Recoverable Resources (formerly called 3P, Proved + Probable + Possible) from 2000 to 2019, we observe that the consistent upward trend in Total Unrisked Technically Recoverable Resources over the period 2016 to 2019, continued. This growth period has now surpassed the last one from 2000 to 2002, both in terms of length and Resource additions. At the same time, gas production remained relatively flat between 2018 and 2019.

SLIDE 2

The P1 + C1 Technically Recoverable Resources, which was formerly referred to as Proved Reserves, has extended its growth path as well. Between 2018 and 2019, the country experienced 113% Replacement of this Resource. This meant, as shown in **Chart Two (2),** that 1.25 TCF of P1 + C1 Resources produced were replaced by

additions amounting to 1.4 TCF in that year, taking the P1 + C1 Resources from 10.5 TCF to 10.7 TCF.

By this statistic the independent auditor confirmed three unbroken years of P1 + C1 Resource (formerly Proved) increases, rising by 0.8 TCF from 9.9 TCF in 2016 – now surpassing the length of the 2000 to 2002 expansion, when it grew from 19.7 TCF to 20.8 TCF.

SLIDE 3

Exploration Resources declined from 2018 to 2019, after rising 34 % between 2016 and 2017 as the immense Deepwater Gas Resource leads were quantified and added to the report, as can be seen on **Chart Three** (3). The fall between 2018 and 2019 is partly due to prospect deletions arising from an unsuccessful well. Nonetheless, exploration success in the Deepwater was responsible for the movement of large volumes out of this category and into Technically Recoverable Resources.

The Year End 2019 Audit report highlights the following movements within the P1 + C1 Technically Recoverable Resources (former Proved) category:

- 1. The 2017 Trinidad Region Onshore Compression Project, also known as (TROC), resulted in upward reserve adjustments for fields located in the Mahogany and Amherstia hubs such as Kapok, due mainly to better well performance and in the Angelin field due to remapping based on new well data. In Amherstia and Mango there were negative revisions due to performance and reclassifications.
- 2. For Shell, the revision of the Original Gas-in-Place (OGIP) due to seismic interpretation in the Endeavour field resulted in an addition of technically recoverable resources.

3. BHP had major success with the Bele, Boom, High-Hat and Tuk exploration wells. The Deepwater discoveries now account for the majority of BHP's P1
+ C1 Resources in Trinidad, by Ryder Scott's estimation

Now that the Year End 2019 Gas Audit is completed, which was the very first 'virtual' Audit for this country, the MEEI and Ryder Scott plan to kick-off data gathering for the year-end 2020 Gas Audit, tentatively in March 2021. Ryder Scott's geologists will be providing independent assessments of the Chinook-1 and Cascadura Deep gas discoveries by Touchstone in the Ortoire Block. Touchstone has estimated that the block could have as much as 500 – 600 bcf of wet natural gas and produce in excess of 200 mmscf/d of gas, and as much as 4000 barrels of condensate per day. Also on the agenda is a possible remapping of fields like Parula, Bounty and Endeavour drilled by EOG and Shell respectively, based on successful development wells and the revaluation of reserves based on well performance.

As always, we continue to look forward to the important work that Herman Acuna and his team will perform for us in future. He will make a more detailed presentation of the findings of the Ryder Scott Audit after I conclude, and I want to assure the media that his presentation in its entirety will be made available to the media. However, you will note that the figures that will be shared with you will be national figures. We cannot, for reasons of confidentiality, disaggregated the reserves by company, because this is considered strategic company information. The Government will continue its drive for transparency in the energy sector, and to keep the public reliably informed.

Even though this presentation today is on reserves as conducted by Ryder Scott, let me conclude with some remarks on the production side. As the nation is aware, 2021 will be a challenging year for gas production. Currently we average just around 3.2 bcf per day. However, there are a lot of important projects that will be coming onstream at the beginning of 2022 and onwards.

On the production side, we expect to see the following projects come onstream in the near future:

- 1. BHP's Ruby project in Q3 2021, producing 150 mmscfd;
- 2. BP's Matapal in 2022, producing 300mmscfd, and an estimated incremental production increase of 300mmscfd from the Cassia-C project, also in 2022;
- 3. Shell's Barracuda and Colibri in 2021 and 2022, with a cumulative capacity of an additional 450 mmscfd, and
- 4. Shell's Manatee development in 2025, which was as a result of the successful delinking with a capacity ranging 350mmscf/d to 700 mmscfd.
- 5. Further down, 2026 and beyond, we are be cautiously optimistic of BHP developing its deepwater gas resources, which, and I say this guardedly, has the potential somewhere between 600mmscfd to 1bcf per day.

So ladies and gentlemen, members of the media, we are sitting on fairly firm ground as far as the reserves position goes. On the production side, we have a challenging 2021 but things are looking quite optimistic from 2022 and beyond.

That is the state of play here at the MEEI, where we are the custodian and regulator of the natural gas industry, and we want to give the nation the commitment that we will continue to use our best efforts to manage the energy resources and the natural gas resources in a way to benefit all the citizens of Trinidad and Tobago. Thank you.