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

SPEECH

SENATOR THE HONOURABLEFRANKLIN KHAN

MINISTER OF ENERGY AND ENERGY INDUSTRIES

ENERGY CHAMBER ANNUAL CONFERENCE

MAXIMIZING VALUE THROUGH COLLABORATION

HYATT REGENCY, PORT OF SPAIN

January 22, 2017

OPENING CEREMONY SALUTATIONS

Parliamentary Secretary, MEEI, Hon. Nicole Olivierre

Members of Parliament and Senators present

Permanent Secretary, MEEI, Mr. Selwyn Lashley

Mr. Eugene Tiah, Chairman of Energy Chamber of Trinidad & Tobago and Members of the Board

Their Excellences, Members of the Diplomatic Corps

Representatives of our Sponsor Companies

Energy Executives especially our foreign guests

Conference Delegates

Members of the Media

Distinguished Ladies and Gentlemen

GOOD MORNING

Introduction

The 2018 Annual Energy Conference and Trade Show hosted by the Energy Chamber of Trinidad and Tobago is one of the premier energy events in the Western Hemisphere attracting the senior decision making executives from leading energy companies and other subsets of the industry.

I am therefore honoured to deliver the feature address to such a distinguished audience. On behalf of the Government Trinidad and Tobago, I extend a hearty welcome to participants of the Conference and trust that your participation is informative and rewarding.

Trinidad and Tobago, through astute and visionary leadership has developed a viable oil and gas industry. The industrial development of our gas resources in particular, is known internationally as the Trinidad Model, and, has served as template for a number of developing energy economies, which include Ghana, and Equatorial Guinea.

We are in the top five ammonia and methanol exporting countries and in the top seven LNG exporting countries with a proven gas reserve of a mere 0.2% of the total global natural gas reserves.

At this juncture we are seeking to build on our resources through the development of our deepwater acreage where we have already seen a level of success and which is likely to be our main focus in the coming years. We are confident that our deep-water province will be our new growth area and provide the upside that is so badly, and desperately needed.

This astute management and development of our hydrocarbon resources has earned Trinidad and Tobago great respect in the global energy community and in international fora.

GECF Event

For 2018 Trinidad and Tobago has been elevated to the Presidency of the Gas Exporting Countries Forum (GECF) consequent on the appointment of the Minister of Energy and Energy Industries of T&T as the President of the Organization at the Ministerial Meeting of the GECF held in Moscow, Russia October 4, 2017. In addition, the Permanent Secretary of the Ministry of Energy and Energy Industries has been appointed as the alternate Chairman of the Executive Board of the Forum for 2018.

The GECF is a gathering of the world's leading gas producers, whose objective is to increase the level of co-ordination among members to maximize the gas value accruing from the monetization of the natural gas resources of members. The organization represents more than two-thirds of the world's proven gas reserves, approximately one-half of global gas production and two-thirds of gas exports.

The membership of the GECF comprises only twelve countries, Algeria, Bolivia, Egypt, Equatorial Guinea, Iran, Libya, Nigeria, Qatar, Russia, Trinidad and Tobago, the United Arab Emirates and Venezuela. Observer status is held by seven countries, Azerbaijan, Iraq, Kazakhstan, the Netherlands, Norway, Oman and Peru.

I am pleased to announce that the annual Ministerial Meeting of the GECF will be held in Port of Spain, Trinidad and Tobago on November 14, 2018. This will represent the second occasion that a Ministerial Meeting of the Forum will be held in Trinidad and Tobago. The previous meeting was held on April 25, 2005. On this occasion, we plan to host a one-day international gas symposium where we will have as participants, two of the most influential figures in the gas industry. His Excellency Mr. Alexander Novak, Minister of Energy of the Russian Federation, and His Excellency Dr. Mohammed Bin Saleh Al- Sada, Minister of Energy and Energy Industry of the State of Qatar, among other energy dignitaries.

Maximizing Value

The continued success of the Energy Conference has been due to the relevance of the issues addressed and the creation of an enabling environment for energy sector collaboration.

This year's theme-Maximizing Value Through Collaboration-is relevant as it provides for an honest discussion on the equitable sharing of value generated from the monetization of our hydrocarbon resources.

Over the last year, there have been requests by the upstream and rightly so for the alignment of value with risk. This created an impasse with the natural gas aggregator NGC in the negotiations on the terms of new contracts for the supply of gas to downstream companies. Its resolution required the involvement of the Honourable Prime Minister, who met with senior executives of BP and EOG Resources at the now famous Houston meeting where the matter was resolved.

These developments were occasioned by a commitment from upstream companies to actively pursue exploration and development activity to improve gas supply. However, the new gas contracts between the NGC and downstream companies would obviously be at higher prices.

Discussions between NGC and the downstream companies have commenced on the terms for new gas contracts. The new reality is that low prices, which obtained in previous years are no longer available. Therefore, greater emphasis has to be placed on the efficient and cost effective conversion of gas into petrochemical products. Additionally, all negotiations now has to take into context its effect on the entire value chain. However, I would like to add that this administration will do anything and everything to ensure the long term viability of petrochemical production at Pt. Lisas. It was Pt. Lisas, that put Trinidad and Tobago on the world energy map and we plan to keep it that way.

Ladies and Gentlemen, the concept on value maximization has been at the expense of the resource owner for far too long. In the adherence to this maxim, the state through generous concessions has been deprived of substantial revenues from the oil and gas sectors. The returns to Government over the period 2014 to 2017 vividly illustrates this situation.

Revenue received from oil and gas companies for fiscal 2014 to fiscal 2017 have fallen drastically both in absolute terms and as a percentage of total Government revenue. In 2014, energy revenue was TT$20.9Bn or 35.7% of total Government revenue of TT$58.4Bn. In 2015, energy revenue fell to TT$12.9Bn or 22.6% of total

Government revenue. The downward spiral continued in 2016 with energy revenue falling to TT$3.0Bn or 6.6 % of total Government revenue. In 2017, the situation was practically unchanged with oil revenue amounting to TT$3.7 Bn or 10.1% of total Government revenue. The decline from 2014 to 2017 was a staggering eighty percent (80%).

Oil and Gas are non-renewable assets and therefore there is a premium to be paid for their exploitation. Accordingly, the State, Trinidad and Tobago has a sovereign right to extract appropriate economic rents for the exploitation of its hydrocarbon resources on behalf of the people who are the owners of the resource. It is unacceptable and untenable that Trinidad and Tobago with an annual hydrocarbon production of approximately 624,000 barrels of oil equivalent per day (cumulative 1.2Tcf; 26.2 million barrels of oil) should be receiving tax contributions in the order of TT$3.7Bn per annum. In fiscal 2017, energy companies received in gross income approximately TT$22.5Bn and Government tax receipts reflected a mere 15% of gross revenue. When benchmarked with other energy producing countries, this is amongst the lowest in the world. This situation cannot be allowed to continue unabated.

As a consequence, the Government has been reviewing the taxation system and the suite of allowances available to oil and gas companies. Effective January 1, 2018 the royalty rate on oil and gas has been set at 12.5%. This will result in an increase in royalties. Other proposed changes to the financial system will be announced by the Minister of Finance in due course.

Let me assure the industry however, that as the Government we are receptive to and welcome investment. However, there must be an equitable sharing of revenue earned from the exploitation of our hydrocarbon resources. Poten and Partners in their Gas Master Plan Report which was tabled in Parliament and is now a public document, highlighted the great disparity in value accruing to Government as compared to that received by energy companies and their affiliates from the monetization of this country's hydrocarbon resources.

Transfer Pricing

In their analysis of the revenue impact of the LNG Trains, Poten and Partners estimated that the potential value loss from the four ALNG trains averaged around US$6Bn per year between 2011 and 2014. These are staggering figures. In general, Poten and Partners have found that the beneficiary of the substantial value generated by the Trains were not so much the upstream gas suppliers; rather offshore jurisdictions which were either low priced markets or high priced markets but with the revenue not flowing back to Trinidad. In the majority of transactions, the offtake arrangements for upstream companies involve sales to downstream marketing affiliates, which potentially lead to non-arm's length transactions.

Indeed, Poten and Partners determined that transfer pricing is endemic in ATLANTIC's transactions and exist in petrochemicals but is not readily apparent. In the case of LNG, the absence of clarity and precision in the existing long-term contractual and commercial arrangements has severely compromised the value received by Trinidad and Tobago for LNG sold by the four (4) Atlantic LNG Trains in marketing arrangements either to related parties of the owners of the Trains or to other marketing agents.

Poten and Partners informed that the existing LNG marketing arrangements are not optimally capturing value for Trinidad and Tobago in an industry, which consumes approximately 60% of the country gas production.

The marketing arrangements have been characterized by the manipulation of contracts, where LNG cargoes are being diverted to high priced markets with no sharing of the upside, in accordance with the contracts. In contracts with 50% upside sharing cargoes they are sent to markets that have lower LNG prices to the benefit of LNG marketers. The resultant effect of the LNG marketing arrangements are low netback prices when compared to domestic prices.

Given the magnitude of the revenue leakage in the domestic energy sector, Government has secured the services of an international energy consultant for advice. Government is also in the process of drafting legislation to address transfer pricing and to clarify current tax laws as they relate to artificial and non-arm's length transactions. This legislation will be tabled in Parliament during 2018. The appropriate steps will be taken to strengthen the public institutions, which are responsible for the administration of these areas. In this regard, the Permanent Petroleum Pricing Committee has been activated and will address transfer pricing in the oil and gas, and petrochemical sectors. This Government plans to deal frontally and decisively with this matter in 2018.

These actions are being taken to ensure that the people of Trinidad and Tobago receive a fair share of the resources that are being depleted.

However, there is an opportunity for meaningful dialogue to correct revenue imbalances though a measured alignment of risk and entitlement. Discussions have already commenced with the energy companies and I am confident that we can arrive at a solution that meets our respective expectations. Accordingly, 2018 will be a pivotal year in the determination of the sharing of value derived from the country's hydrocarbon resources. This means that conversation on value maximization is no longer the domain of the upstream, midstream and downstream only, but must incorporate the rights of the State both as the resource owner and as a partner in exploitation of our hydrocarbon resources.

Local Content

I will now move to Local Content, which I must add is another of the Government's pet peeve.

The concept of value is not limited to direct contributions from the industry but also to its indirect contributions in the form of added value to the economy of Trinidad and Tobago. However, with the exception of work captured by TOFCO and the local services sector very little value is retained in the economy from the domestic energy sector. It is therefore clear that the local content policy framework and guidelines are not working.

Our local content policy has been a model for many other jurisdictions, where Governments have quickly moved their own policies to regulations and established administrative agencies to ensure the benefits are secured.

During the period of low revenues, implementation of the Policy in line with existing regulations would have helped reduce revenue leakage, much of which arose from contracts awarded to providers domiciled outside of the Trinidad and Tobago tax net and foreign firms and individuals being given preference over locals, often with questionable justification.

We, therefore, propose to reconstitute and strengthen the Permanent Local Content Committee, which is charged with the mandate to oversee and report on the implementation of the Local Content and Participation Policy Framework, and to review the local content policies and guidelines.

A case in point is the decision by BP to take Angelin fabrication to Mexico. Whilst Government understands the rationale for this decision, we consider this as hopefully a temporary arrangement, and that in the future such fabrication works will be undertaken in Trinidad. To this end, I will be visiting Mexico with BP at the end of the week with a delegation comprising officials from BP and the Trinidad and Tobago Energy Chamber to obtain an in-depth understanding of the systems and processes at work. As we seek to attract more investment, local companies must also become more reliable and competitive especially where labour related issues and delivery time lines are concerned.

The energy companies propose to spend US$10Bn over the next five years. If we set ourselves a target to increase local content by 10%, it will add an additional US$1.0Bn to the domestic economy with positive benefits. As the private body, overseeing the interests of the local energy sector the Energy Chamber has to be more aggressive in the promotion of local content and value.

There is also a case for a review of its employment practices as the industry has an un-flattering record when it comes employment in absolute terms and also as a percentage of total national employment. We recognize that the industry is capital intensive and therefore the labour component is low, when compared with other industries.

Notwithstanding, employment in the industry at the best of times has peaked at 3.8% of total national employment. Over the period, 2014 to 2017 employment in the sector fell from 21,700 persons or 3.4% of total employment to 14,900 persons or 2.4% of total employment. Evidence of this under-employment in the industry became apparent when the Ministry of Energy and Energy Industries invited applications for entry-level technical positions. There were 241 applications for six (6) positions of Petroleum Engineer and responses of similar magnitude were received for other advertised entry-level technical positions. Collectively, the Government and energy companies through production sharing contracts (PSC) and on their own accord have financed the education of these young people. Therefore, we will be reviewing employment practices in the industry and also our work permit procedures in an effort to protect and enhance the local workforce.

With respect to work permits, we will now be more selective in the issuance of these.

This country has spent TT$600M on the GATE Programme and we have created the University of Trinidad and Tobago (UTT) as a Technology Institution. Therefore, more must be done by the sector to employ young engineers and professionals into the industries. I challenge the sector to proceed post haste on regularizing this troubling situation.

Global Oil and Gas Industry

On a wider context, 2018 appears to be a promising year for the global oil and gas industry. There is a general consensus by industry analysts that the industry is in recovery mode. The arrangement between OPEC and Russia to constrict crude production to offset the US shale oil boom has worked. Oil prices have recovered with WTI, which is the marker for local crudes moving from a low of US$42.33 per bbl in June 2017 to a high of US$64.30 per bbl on January 12, 2018. Gas prices in particular Henry Hub Prices, which fell to a seventeen (17) year low price of US$2.52 per MMBtu in 2016, rebounded in 2017 averaging at US$2.99 per MMBtu.

The outlook for oil and gas prices for 2018 is positive. The forecast for WTI and Brent crude prices is in the region of US$50 to US$60 per barrel. Action by OPEC, Russia and US shale oil producers will influence the ultimate oil price. Overall, the industry is expected to decline marginally due to increased gas production and is expected to be in a better position in 2018 when compared with 2017.

Domestic Upstream Activity

There were also signs of recovery in the domestic energy sector in 2017. Upstream activity was instrumental in stabilization of hydrocarbon production. In total, 77 wells comprising of 76 development wells and one (1) exploration well were drilled in 2017. Petrotrin and its combined Lease/Farmout/IPSC Contract operators contributed significantly to development drilling activity as they drilled 55 development wells or 71% of the development drilling activity. The lone exploration well, the Macadamia Well was drilled by BPTT.

The average crude oil production for 2017 was 71,700 barrels per day compared with 71,486 barrels per day in 2016. Gas production which averaged at 3.3Bcf per day in 2016, reached as high as 3.8Bcf per day in 2017. The resurgence of activity in the domestic oil and gas industry continues into 2018 with plans by companies to drill 81 wells, comprising 64 development wells and 17 exploration wells.

BPTT will spud five (5) development wells in 2018. This includes two (2) on Angelin and three (3) on Cannonball. Drilling is scheduled to begin in the fourth quarter of 2018 and first gas from Angelin is expected in first quarter 2019.

Shell proposes to drill seven (7) development wells in its East Coast Marine Area (ECMA), of which, three (3) wells are earmarked for the Starfish Field and four (4) in the Dolphin Field. In addition, at least one (1) appraisal well is planned for Blocks 5(c) and 5(d) in 2018.

DeNovo Energy, which operates Block 1(a) on the West Coast of Trinidad, will drill three (3) development wells in its Iguana Field. The drilling and completion of the three (3) Iguana wells is expected to be completed during 2018 with first gas projected for the fourth quarter, at an initial rate of 60 MMscf/d.

The other major planned development drilling activity will be primarily on land by Petrotrin (18 wells), the operators under the Lease Operatorship, Farmout and Incremental Production Services (25 wells) and Primera Oil and Gas Limited (8 wells).

The accumulation of the proposed development activities will have an incremental impact on hydrocarbon production, particularly natural gas, which in 2017 had made a positive movement due to projects such as Sercan, TROC and Juniper. The cumulative effect of these projects led to an increase in natural gas production from an average of 3,348MMscf/d in January 2017 to 3,816MMscf/d in December 2017.

For 2018, gas production will be augmented with gas from the new De Novo Iguana Field and from Shell's Starfish and Dolphin Fields. In the near term, gas production will be enhanced by compression projects proposed by EOG for its Osprey Field and by BP for its Cassia Field and in its Savannah and Macademia Gas finds. Cross-border and Venezuelan gas is also high on our agenda. In this regard, the Unitization and Unit Operating Agreement among E&P companies, PDVSA, Chevron and Shell Trinidad and Tobago Limited for Loran-Manatee has been completed and is expected to be executed in the first quarter of 2018. Similarly, a Gas Sales

Agreement for Dragon Gas among NGC, Shell and PDVSA for a gas supply estimated at an initial 150 MMscfd per day has been drawn-up by the parties and is also expected to be executed in the first quarter 2018.

Given existing and proposed projects, preliminary estimates indicate that the gas supply for 2018 could average in the region of 3.7Bcf per day. This would bring a measure of relief to the downstream companies.

In respect of crude oil and condensate, the current production of approximately 72,000 barrels of oil per day is expected to be maintained. The major oil producer in Trinidad and Tobago is Petrotrin, which together with contracted services account for approximately 58 per cent of the country's total production. In 2017, a new Board of Directors was appointed with a mandate to return the company to profitability and its management as a private commercially oriented company.

The company is in a challenging financial position. It is heavily indebted, currently to the tune of TT$13Bn and has a substantial working capital deficit. It has high lifting costs both on land and in Trinmar. Low refinery utilization and negative margins have contributed to the losses incurred by the company. Because of financial difficulties Petrotrin has not been meeting obligations to the State, which amounts to approximately TT$3Bn.

The Board is currently working on a plan for the restructuring and charting the company back to viability. However, before any decision is taken on these matters there will be widespread consultations with all stakeholders and particularly the employees' union representative.

One of the clear indications of a resurgence in the domestic energy sector is the increase in development and exploration drilling. In 2018, there are plans to drill seventeen (17) exploration wells as compared to one (1) well in 2017. EOG resources have scheduled the drilling of four exploration wells in its Modified U (b) block in period commencing second quarter and ending fourth quarter 2018.

BHP will be recommencing its deep-water exploration with the drilling of three (3) exploration wells, two (2) of these wells to be drilled in Block TTDAA 5 and the third in Block TTDAA 14. BHP drilled the LeClerc-1 well during May to August of 2016 as the first of two exploration wells required during the first exploration phase of the Block TTDAA 5 Production Sharing Contract (PSC). The results of this well was preliminarily classified by BHP as a Natural Gas Discovery. BHP's work plan for 2018 is expected to commence as early as April 2018.

Petrotrin will be drilling five (5) explorations wells in its Trinmar acreage. The remaining five (5) exploration wells are to be drilled on Petrotrin's land acreage by lease and farm-out operators.

Given the planned level of activity for 2018, the outlook for the domestic energy sector is reassuring. This has been taken into consideration by the International Monetary Fund in its projection of real GDP growth of 1.9% in Trinidad and Tobago in 2018.

Caribbean Basin- Upstream Developments

It was not too long ago that any reference to oil and gas exploration in the English speaking Caribbean was a reference to Trinidad and Tobago. In 2012, a US Geological Report estimated that the region holds 126 billion barrels of oil and 679 trillion cubic of undiscovered gas in 31 geological provinces. This information dispelled the notion that apart from Trinidad and Tobago, the Caribbean was a poor hydrocarbon region. In 2015, Exxon Mobil made a major discovery of oil and gas offshore Guyana. Exxon Mobil has continued to make other discoveries, which is an indication of the prospectivity of the region. This has sparked an interest in the region by major energy companies, and the countries, for example, Grenada, Barbados, Suriname, Jamaica and the Bahamas have seized the opportunity to attract investment by upstream companies in the exploration for hydrocarbons.

The development of the wider Caribbean as a hydrocarbon province provides an opportunity for Trinidad and Tobago with its technical expertise, capacity and experience to assist Member CARICOM States in the development of their hydrocarbon resources. In this regard, the Government of Trinidad and Tobago has extended an offer of technical assistance to the Government of Guyana. This is being formalized through a proposed Memorandum of Co-operation between both countries. To this end, I am due to meet next month with Guyana’s Minister of Natural Resources, the Honourable Raphael G.C Trotman to advance this matter and also to position Trinidad and Tobago as the leader in a new Caribbean Energy Diplomacy.

Renewable Energy

The pursuit of development of hydrocarbon resources by Caribbean countries adds another dimension to the attainment of energy security for the region by supplementing renewable energy initiatives undertaken by the region. Although, a late entry in the renewable energy programme, Trinidad and Tobago recognize the benefits that would accrue from the diversification of its energy mix. Let me remind this audience that Trinidad and Tobago is the only country in the Western Hemisphere that generates 100% of its Power from Natural Gas, the cleanest of the fossil fuels. To this end, we have set a target of 10% renewable power generation by 2021. In this regard, expressions of interest have been invited from suitably qualified international firms with a local joint venture partner to design, build, operate, maintain and finance renewable energy projects greater than or equal to 3MW for grid integration. Expressions of interest have also been issued for the development of a Waste to Energy Facility at the Beetham Landfill for the conversion of municipal waste for power generation.

Pursuant to its commitment to the global environment, the Government has agreed to ratify the Paris Climate Change Agreement to which Trinidad and Tobago is a signatory and is required to reduce cumulative greenhouse gas emissions from Power Generation, Transportation and Industrial Sectors by 15% by 2030 relative to a business as usual baseline.

As part of its strategy in the reduction of greenhouse gases Government is aggressively promoting the increased utilization of CNG as a major transportation fuel. Based on this commitment, the grant of fiscal incentives benefitting a crosssection of participants ranging individuals to installers and a competitive price compared to liquid fuels, there has been an upsurge in the interest and the adoption of CNG as the transportation fuel of choice. In addition, I have instructed Petrotrin to accelerate its Enhanced Oil Recovery Program especially the CO_2 injection. This initiative will have a twofold effect – boost oil production and reduce our carbon footprint.

Conclusion

Ladies and Gentlemen, upon the assumption of office, one of the major goals of this administration was to create the appropriate environment to stimulate the recovery of the domestic energy sector and national income and to put us back on the path to sustained growth in the sector.

Progress has been measured and due to intervention at the highest level, we are seeing positive signs that recovery is on the way. Over the coming years upstream companies have committed to capital investments in excess of US$10Bn which will serve to maintain the momentum in the industry.

However, we cannot take all of the credit. The major exporting countries, namely those that comprise OPEC, the Russian Federation and their allies have brought stability to the market, which has facilitated new investment.

There is still a lot of work to do. We are in the process of finalizing negotiations with our Venezuelan counterparts for a tranche of gas from their Dragon Field and for the sharing of production from our cross-border fields, Loran-Manatee, Manikin-

Cocuina and Kapok-Dorado. The culmination of these developments would bring a new and added dimension to the gas business in Trinidad and Tobago, particularly when combined with our proposed Caribbean Energy Diplomacy interventions.

We are confident that our policy prescriptions and strategies will create resurgence in the sector not at historic high levels but at an optimum level, which is based on efficiency and cost effectiveness, that is sustainable in the long term and recognizes the right of the resource holder to its fair share of the economic rents.

In closing, I wish to thank the Energy Chamber for the opportunity to address this distinguished audience and to provide an overview of the domestic energy sector. Please accept my congratulations for your hosting of yet another successful Energy Conference.

I thank you for your attention.