Good morning all. Let me firstly commend SPE for another successful conference. The theme is “Future Assets: Acquisition, Maintenance & Reliability.” This is very relevant to Trinidad and Tobago and indeed to the global oil and gas fraternity. Let me also say that I am pleased that the MEEA is a titanium sponsor of this event. At the MEEA we encourage involvement in the SPE and I am pleased that our own Ayasha Nickie is the Technical Programme Coordinator of the SPE.

The MEEA is also very present in the technical sessions notably:

Reintroduction of Carbon Dioxide Supply from Central to South Trinidad via Pipeline - Perspectives and Possibilities for Using Present System by S.A. Butcher, J. Isaac, C. Frontin-De Peaza

Multiclient 3D Seismic Surveys in Trinidad and Tobago - Towards a Policy by Dr. W. De Landro-Clarke, P. Bradshaw-Niles

Trinidad and Tobago: Diving into the Deep but at What Cost? by A.W. Nickie,

The Performance Characteristics of Waterdrive Gas Reservoirs off the South-East Coast of Trinidad by Christian Welsh

Later today Sameer Ali Acting Chief Mechanical Engineer will be part of a panel to discuss Asset Integrity.
The theme of the conference is very provoking “Future Assets: Acquisition, Maintenance & Reliability.” It speaks to the future. We need to spend more time in this country discussing the future and less time talking about the past. After three years as your Minster of Energy I can tell you that this country has a bright industrial future.

I intend today to make two major points. The first is that I intend to give an idea of the future work programmes for upstream and secondly we can explore where maintenance and asset integrity fit into that story.

Turing to our upstream, our preliminary analysis shows that at the very least we should be able to hold the 4.2 billion cubic feet per day plateau rate until 2025. This is subject to the realization of related investment and that investment will come from the incumbents.

Let’s look at foreign direct investment for a minute.

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
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<tr>
<td>$US million</td>
<td>549</td>
<td>1831</td>
<td>2453</td>
<td>1713</td>
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Traditionally 90% of FDI is energy related. That assumption has held for the last four years. The point is we have seen a surge in energy related FDI since 2010 and this is due to increased investor confidence (particularly from the incumbent players BP, BG, BHP and EOG) and this is also related to the fiscal incentives that have been provided in every budget for the last four years. In the upcoming 2014/2015 I intend to look closely at how we could incentivize the development of small stranded pools of natural gas.

In 2014 the forecasted capital expenditure for the energy sector is $US 3.3 billion. In 2015 that figure is $US3.2 billion and in 2016 it is $US 3.0 billion. The main actors in these numbers are BP, BG and Petrotrin. Most of that money is being spent to bring oil and gas to the surface and to market in a safe and efficient manner. The incumbents all have a growth story around Trinidad and Tobago and the proof is that they are investing again in substantial sums. You all would be feeling the impact of that investment with the level of drilling taking place around the country. BP for example is currently maintaining a two rig drilling programme and we expect that to increase to three in 2015 as they commence work on Juniper.

So in the past four years there has been no increase in taxes on companies in the energy sector. This has allowed upstream companies, for the first time in many years; to operate in an environment of certainty. Companies like certainty and don’t like having the rug pulled from under them. This comes against the backdrop of almost a decade of indecision as it relates to the fiscal regime. At the MEEA we make decisions about the fiscal regime in the national interest.
In the last four years we have simplified the competitive bidding process. The result is that we have signed:

- Seven deepwater Production Sharing Contracts
- Five shallow/average depth water Production Sharing Contracts
- Granted a license to Petrotrin for its Trinmar acreage in 2012

This year we expect to sign two more Deepwater PSC’s and three onshore licenses with Range Resources, Territorial and Lease Operators Limited. There are currently 28 active PSC’s dating back as far as 1974. Of these 28 active PSC’s 12 were signed in the last four years. At the 2014 Energy Conference, I announced the award of three land blocks to Range Resources, Lease Operators Limited and Touchstone. These three blocks, together with the Trinmar license and the seven existing deepwater PSC’s will lead to the drilling of at least 31 exploration wells (these are based on contractual obligations) in the next eight years and at most 53 exploration wells. The additional 22 will be based on the optional second and third exploration phases under signed PSC’s.

Again looking into the future, the year 2018 is a very significant one for T&T as we must treat with the renewal of the Train I contract as well as the renewal of the BP domestic contract. In 2015 (next year) the BG / Chevron Base Gas Sales Contract with NGC expires.

These are big contracts that impact the future of the country. We don’t intend to make decisions around these contracts without the benefit of a new natural gas master plan and it is for that reason we have commissioned such a study. Last Thursday was the deadline for submissions of proposals to the Central Tenders Board.

I would like to again stress that the energy sector is not only Point Lisas. For far too long there has been a tendency to see the energy sector as only Point Lisas. This might be because people don’t see the marine side of the upstream. Without the upstream there is no energy sector. Without the upstream there is no Point Lisas and no Atlantic LNG. So based on what we are seeing with investments by BP in Juniper and later on in the prospects from the OBC seismic and BG’s investments in Starfish, Block 5C and 5D.

With regard to oil production, the Petrotrin OBC seismic over the Trinmar and North Marine Acreages is now complete. As you well know it was not without its challenges. I expect that 3D seismic to be a game changer for Trinmar and for oil production. These data will now be processed. In 2011 Petrotrin completed the largest ever land based seismic and the processing of this data has already informed the identification of new prospects.

We are now seeing signs too of improvement at Trinmar where production has averaged over 23,000 bopd for the last four months. The flagship project of Petrotrin, the South West Soldado
project is expected to realized an incremental production of almost 7000 bopd by 2018 with a
total investment of $TT 3.5 billion in the next four years. There are also good signs from Leni
Gas and Oil, Range, Trinity and Touchstone.

Safety / Asset Integrity

All this future exploration and development must be underpinned by infrastructure.

Safety, asset integrity, reliability and maintenance have been dominant issues in our industry
since they were highlighted by the Piper Alpha incident in the North Sea in 1988 causing the loss
of 167 lives. In 1989 there was the Exxon Valdez disaster and in March, 2005 an occurred at the
isomerization unit at BP's Texas City refinery in Texas City, Texas, killing 15 workers and
injuring more than 170 others. In 2010 there was Macondo in the Gulf of Mexico.

These accidents have had an impact on safety in our industry. In April 2010 the BP Macondo oil
spill was viewed by a global audience of billions. That accident has significantly changed the
way BP does business and this of course has consequences for BP’s operations in Trinidad and
Tobago. This is the new world of safety where companies like BP and others here have made
safety their number one business deliverable. The past three years have been hard. We have had
to endure curtailments at Point Lisas and at Atlantic because of BP’s maintenance activities.

The industry in Trinidad and Tobago is stronger for this maintenance work. In September to
October last year we underwent the largest coordinated maintenance programme in the history of
this country. At one point 25% of the country’s natural gas supply was offline. The maintenance
involves the BP Cassia B Hub, the BG Dolphin Platform, Atlantic’s Train III and nine plants at
Point Lisas.

So ladies and gentlemen it is not business as usual as we move forward. For the industry to
survive and to continue being the economic centre of gravity of the country – we must focus on
asset integrity, maintenance and safety.

The situation in the Pointe-a-Pierre refinery is one that we must carefully consider. In the last
three years 2011 to 2014 fifteen plants were shutdown for turnarounds many of which were long
overdue for maintenance. By contrast during the 5-year period 2005-2010, seven plants were
shutdown for turnarounds. This placed an enormous demand on manpower and financial
resources as well as contractor and materials logistics which adversely affected other asset
integrity and maintenance measures. R&M, over the last three years has had to play catch up
with the outstanding turnarounds. This placed an enormous demand on manpower and financial
resources as well as contractor and materials logistics which adversely affected other asset
integrity and maintenance measures.
Arising from this several asset integrity initiatives have been developed and are in various stages of implementation, all aimed at improving asset availability and reliability, recovering Petrotrin’s proactive maintenance programmes and improving our personnel competence level. These initiatives include establishment and implementation of a rolling ten-year maintenance turnaround plan for major assets including process plants, boilers and marine berths. This plan has been completed and is in place.

The MEEA is also in the process of retaining a consultant to implement the national facilities audit of the energy sector. This will cover all aspects of the sector including the downstream sector. I want to add that the Petroleum Regulations section 42 under general obligations of licensees gives the Minister the authority over licensees as it relates to the improvement of their HSE practices.

As we progress the energy sector into the future we are cognizant that we do so using aging infrastructure. It makes more economic sense to prolong the life of this infrastructure than to invest in new kit. In some cases the economics of rejuvenating mature offshore fields only work if we prolong the life of existing infrastructure. In these cases the project economics make no sense if we have to install new infrastructure.

Increasingly, moving forward into the future will mandate that the energy sector in Trinidad and Tobago invest in asset integrity and maintenance to prolong the life of assets and to ensure the reliability and deliverability. This is especially important given that the future growth in the upstream will come from a mixture of new discoveries and mature fields.

In closing let me congratulate the SPE and all presenters and organizations here today and wish you a productive conference.