

THIRD SESSION OF THE TWELFTH REPUBLICAN PARLIAMENT

TWELFTH

REPORT
FROM

THE PUBLIC ACCOUNTS
COMMITTEE

EXAMINATION
OF

Follow-Up on the implementation of the recommendations made in the Thirtieth Report of the PAC on the concerns raised in Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries (MEEI).

Office of the Parliament
Parliamentary Complex
Cabildo Building
St. Vincent Street Port of Spain
Republic of Trinidad and Tobago



Public Accounts Committee

The Public Accounts Committee (PAC) established by the Constitution of the Republic of Trinidad and Tobago in accordance with Section 119(4) is mandated to consider and report to the House of Representatives on:

- (a) appropriation accounts of moneys expended out of sums granted by Parliament to meet the public expenditure of Trinidad and Tobago;*
- (b) such other accounts as may be referred to the Committee by the House of Representatives or as are authorized or required to be considered by the committee under any other enactment; and*
- (c) the report of the Auditor General on any such accounts.’*

Current membership

Mr. Davendranath Tancoo	Chairman
Ms. Jearlean John	Vice- Chairman
Mrs. Ayanna Webster-Roy	Member
Mr. Adrian Leonce	Member
Mrs. Paula Gopee-Scoon	Member
Mr. Roger Monroe	Member
Dr. Amery Browne ¹	Member
Mrs. Hazel Thompson-Ahye ²	Member

Committee Staff

The current staff members serving the Committee are:

Ms. Keiba Jacob	Secretary to the Committee
Ms. Hema Bhagaloo	Assistant Secretary to the Committee
Ms. Khisha Peterkin	Assistant Secretary to the Committee
Mr. Justin Jarrette	Senior Research Specialist
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Publication

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¹ Dr. Amery Browne was appointed in lieu of Mr. Randall Mitchell with effect from January 12, 2021.

² Mrs. Hazel Thompson-Ahye was appointed in lieu of Ms. Charrise Seepersad with effect from October 24, 2023.

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Members of the Public Accounts Committee
TWELFTH PARLIAMENT, REPUBLIC OF TRINIDAD AND TOBAGO



Mr. Davendranath Tancoo
Chairman



Ms. Jearlean John
Vice- Chairman



Mrs. Ayanna Webster-Roy
Member



Mrs. Paula Gopee-Scoon
Member



Mr. Adrian Leonce
Member



Mr. Roger Monroe
Member



Dr. Amery Browne
Member



Mrs. Hazel Thompson-Ahye
Member

Executive Summary

The Public Accounts Committee (PAC) is the Parliamentary Financial Oversight Committee tasked with the responsibility of examining the Report of the Auditor General and Audited Accounts of Statutory Authorities and Bodies. The Committee presents its Twelfth Report of the Twelfth Parliament which details its *follow up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee on the concerns raised in Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries (MEEI)*, highlighting its findings.

During this inquiry, the following issues arose:

- The MEEI's Lack of Responsiveness to the PAC;
- The MEEI's Implementation of the Auditor General's Recommendations;
- The MEEI's Implementation of the Production Verification Committee's Recommendations;
- Human Resource; and
- Illegal Quarrying.

Based on the Committee's examination, the following observations were made:

- *In addition to its constitutional mandate (Section 119(4)) to consider and report to the House of Representatives on reports of the Auditor General on the public accounts, the Committee reiterates - in light of the MEEI's unresponsiveness to its requests throughout 2022 - its powers to "send for persons, papers and records" granted under Standing Orders 111 and 101 of the House of Representatives and the Senate respectively;*
- *The Committee emphasizes the importance of filling all of the MEEI's key specialised positions in the interest of avoiding prolonged adverse effects on the Ministry's ability to fulfil its mandate, and therefore welcomes the ongoing recruitment efforts; and*
- *The Committee notes the slow pace of progress towards the conduct of the aerial surveys of lands. This initiative was similarly described as ongoing at the time of the 2019 public hearing that led to the publication of the 30th Report of the 11th Parliament PAC. This serves as further illustration of the concerns raised at Issue 2 – 'MEEI Implementation of Auditor General Recommendations' of this Report.*

Based on the Committee's examination the following recommendations were proposed:

- *The MEEI should report to Parliament on the incorporation of specific matters arising from the Reports of the Auditor General into the Ministry's next Strategic Plan by January 29, 2024;*
- *The MSDFS should submit a status update to Parliament by January 29, 2024 including the following:*
 - a. *The expected completion timeline for the implementation of the PVC recommendations which were classified as "in progress" in March 2022; and*
 - b. *The obstacles hindering action on the recommendations for which no status was given in March 2022 and the possible way forward to overcome those obstacles.*
- iii. *The MEEI should report to Parliament on the status of its efforts to fill all established public service posts relevant to addressing revenue leakages, including positions filled and those not yet filled as well as the reasons for some positions not being filled, by January 29, 2024; and*
- iv. *The MEEI should submit a status update to Parliament by January 29, 2024 including the following:*
 - a. *An indication of whether any decision was reached in the legal proceedings related to the four (4) identified cases of illegal quarrying for which eighteen (18) persons were arrested;*
 - b. *The expected timeline for the conclusion of the procurement process for aerial surveying services and the estimated cost of this procurement;*
 - c. *A brief description of the ways in which satellite technology has been used to detect illegal quarrying in other jurisdictions and the applicability of this approach in Trinidad and Tobago;*
 - d. *Confirmation of whether the updated Minerals Regulations have been approved by the Law Reform Commission; and*
 - e. *The status of the stated efforts to develop a system to estimate the quantity of minerals and materials lost to illegal quarrying.*

Introduction

The PAC of the Twelfth Republican Parliament was established by resolutions of the House of Representatives and the Senate at the sittings held on Monday November 9, 2020 and Tuesday November 17, 2020 respectively.

The Constitution of the Republic of Trinidad and Tobago mandates that the Committee shall consider and report to the House on appropriation accounts of monies expended out of sums granted by Parliament to meet the public expenditure of Trinidad and Tobago and the report of the Auditor General on any such accounts.

In addition to the Committee's powers entrenched in the Constitution, Standing Orders 111 of the House of Representatives and 101 of the Senate also empower the Committee, inter alia, to:

1. Send for persons, papers and records;
2. Have meetings whether or not the House is sitting;
3. Meet in various locations;
4. Report from time to time; and
5. Communicate with any other Committee on matters of common interest.

Election of the Chairman and Vice-Chairman

In accordance with section 119(2) of the Constitution, the Chairman must be a member of the Opposition in the House. At the first meeting held on Wednesday November 18, 2020 Mr. Davendranath Tancoo was elected Chairman of the Committee and Ms. Jearlean John was elected Vice-Chairman of the Committee.

Establishment of Quorum

The Committee is required by the Standing Orders to have a quorum so that any decisions made by the Members during the meetings can be considered valid. A quorum of three (3) Members, inclusive of the Chair or Vice-Chairman, with representatives from each House was agreed to by the Committee at its First Meeting.

Determination of the Committee's Work Programme

The Committee agreed to a work programme for the Third Session of the Twelfth Parliament as follows:

1. Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for the Financial Year 2022
2. An examination of the concerns raised in the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago for FY 2021 with specific reference to the administering of government grants
3. The Children's Authority of Trinidad and Tobago (CATI)
4. The Ministry of Energy and Energy Industries (Issues raised in the Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago) [Follow-Up]
5. The Public Transport Service Commission (PTSC)
6. The Agricultural Development Bank of Trinidad and Tobago (ADB)
7. The Police Complaints Authority (PAC)
8. The Regulated Industries Commission (RIC)
9. The Caribbean Industrial Research Institute (CARIRI)
10. The Water and Sewage Authority of Trinidad and Tobago (WASA)
11. The Trinidad and Tobago Electricity Commission (TTEC)

The Inquiry Process

The Inquiry Process outlines steps taken by the PAC in developing the findings and recommendations of its follow up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee on the concerns raised in Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries (MEEI).

The Inquiry Process included the following steps:

1. Examined the responses to the 30th Report, 11th Parliament, of the PAC from the MEEI and identified areas for follow-up;
2. Sent questions for written submission to the MEEI on January 24, 2022 and received the responses to those questions on March 16, 2022;
3. Prepared an Issues Paper which identified and summarised matters of concern in the written responses from the MEEI;
4. Based on the issues identified, the Committee agreed to have a public hearing;
5. The public hearing was held on March 22, 2023. Representatives of the MEEI and of the Auditor General's Department attended the hearing to discuss the issues of concern (see Appendix I – Witnesses);
6. Questions for additional information based on the issues discussed at the public hearing were sent to the MEEI on April 5, 2023 (see Appendix II – Minutes). The responses to these questions were received on April 20, 2023;
7. Reported the Committee's findings and recommendations to Parliament upon conclusion of the inquiry;

8. The Report will be transmitted to the MEEI for written response within sixty (60) days in accordance with Standing Orders 110(6) of the House of Representatives and 100(6) of the Senate; and
9. Subsequent further follow-up will be carried out on an ongoing basis to monitor progress in the implementation of the Committee's recommendations.

Background – Ministry of Energy and Energy Industries

Business and Departments of Government³:

The MEEP's schedule of responsibilities include the following:

- Energy Policy Planning and Research;
- Hydrocarbons;
- Natural Resources;
- Power Generation; and
- Quarries and Mines

Functions⁴

- Leasing and/or licensing of areas for petroleum exploration and production;
- Regulation and management of all oil and gas development activities;
- Regulation and management of upstream operations in oil refining activities;
- Administration of domestic marketing of petroleum products, natural gas transmission/sales, petrochemical manufacture and other natural gas based industries;
- Formulation and implementation of legal instruments for the petroleum industry;
- Acquisition, analysis and dissemination of both local and international petroleum information;
- Sharing responsibility with the Ministry of Finance for the collection of petroleum revenues accruing to the State;
- Representation of the interests of Trinidad and Tobago at international petroleum fora and institutions;
- Long term planning, development and implementation of policy initiatives in the petroleum sector;

³ Trinidad and Tobago Gazette, No. 61 of 2021 dated April 27, 2021. Accessed July 4, 2023. Available: <http://news.gov.tt/sites/default/files/E-Gazette/Gazette%202021/Gazettes/Gazette%20No.%2061%20of%202021.pdf>

⁴ MEEI website, Our Roles and Functions. Accessed July 4, 2023. Available: <http://www.energy.gov.tt/about-us/our-roles-and-functions/>

- Sharing of the management of the State’s interests and assets in the oil and gas industry; and
- Sharing responsibility for the administration and management of the minerals sector.

Divisions⁵

- Contract Management
- Commercial Evaluation
- Downstream Petroleum Management
- Energy Research and Planning
- Petroleum Operations and Management
- Legal
- LNG and Gas Exports
- Minerals
- Resource Management

Minister⁶

Hon. Stuart Young, M.P., with effect from April 19, 2021.

Permanent Secretary

Mrs. Penelope Bradshaw-Niles

⁵ Ibid, Divisions. Accessed July 4, 2023. Available: <http://www.energy.gov.tt/about-us/the-organisation/divisions/>

⁶ Trinidad and Tobago Gazette, No. 61 of 2021 dated April 27, 2021. Accessed July 4, 2023. Available: <http://news.gov.tt/sites/default/files/E-Gazette/Gazette%202021/Gazettes/Gazette%20No.%2061%20of%202021.pdf>

Background – Auditor General’s Department⁷

Establishment of the Office of the Auditor General

The Constitution of the Republic of Trinidad and Tobago (Act 4 of 1976) Chapter 8– Section 116 states that:

- 1) There shall be an Auditor General for Trinidad and Tobago, whose office shall be a public office.
- 2) The public accounts of Trinidad and Tobago and of all officers, courts and authorities of Trinidad and Tobago shall be audited and reported on annually by the Auditor General, and for that purpose the Auditor General or any person authorized by him in that behalf shall have access to all books, records, returns and other documents relating to those accounts.
- 3) The Auditor General is hereby empowered to carry out audits of the accounts, balance sheets and other financial statements of all enterprises that are owned or controlled by or on behalf of the State.
- 4) The Auditor General shall submit his reports annually to the Speaker, the President of the Senate and the Minister of Finance.
- 5) The President of the Senate and the Speaker shall cause the report to be laid before the Senate and the House of Representatives, respectively, at the next sitting of the Senate and the House of Representatives after the receipt thereof, respectively.
- 6) In the exercise of his functions under this Constitution the Auditor General shall not be subject to the direction or control of any other person or authority.

Mission

To independently audit and report on the use of public resources for the benefit of the country and its people, and to lead by example.

Core Values

Values are the principles that represent the key ideas and ideals through which the Auditor General’s Department is governed. They are the fundamental thoughts that shape behaviour and operations. In this context and based on its Beliefs and Philosophy the Department’s core values include:

⁷ Auditor General’s Department website, *About Us*. Accessed June 27, 2023.
Available: <https://www.auditorgeneral.gov.tt/content/overview>

1. Integrity: The Auditor General's Department has built its image on this platform. All staff will contribute to the furtherance of this value.
2. Accountability and Transparency: These values will be foremost in the operations of the Auditor General's Department on a daily basis.
3. Endorsement of open communication: Employee participation and involvement in the business of the Auditor General's Department is a basic principle of its operations.
4. Confidentiality: This is in force at all times.
5. Professionalism: All staff would operate with professionalism at all times.
6. Participatory Leadership: Leadership in the Auditor General's Department goes beyond the 'open door policy.' Key staff are empowered to make decisions.
7. Service Orientation: Superior service to the Government and people of Trinidad and Tobago will be the strongest orientation of the Auditor General's Department.

Appointment of the Auditor General

The Auditor General is appointed by the President of the Republic of Trinidad and Tobago after consultation with the Prime Minister and the Leader of the Opposition and may hold office up to age sixty-five (65) years and may be removed from office only on certain grounds and after a prescribed procedure. Those provisions are entrenched in the Constitution of the Republic of Trinidad and Tobago (1976).

Auditor General

2019 – July 2023 - Ms. Lorelly Pujadas

July 2023 – Present - Ms. Jaiwantie Ramdass

Role and Function

The Auditor General is required by law to examine and report annually to Parliament on the accounts of Ministries, Departments, Regional Health Authorities, Regional Corporations and such State Controlled Enterprises and Statutory Boards for which the Auditor General is the statutory auditor.

The portfolio also includes the audit of:

- The accounts of projects funded partly or wholly by International Lending Agencies;
- All pensions, gratuities and other separation benefits paid by the State in accordance with the Pensions Acts and other Agreements; and

- The grant of credit on the Exchequer Account in accordance with the requirements of section 18 of the Exchequer and Audit Act, chapter 69:01.

The audit services take the form of financial audits, compliance audits and value for money audits intended to promote:

- Accountability;
- Adherence to laws and regulations; and
- Economy, efficiency and effectiveness in the collection, disbursement and use of funds and other resources.

Duties and Powers of the Auditor General

The duties and powers of the Auditor General are defined in the Exchequer and Audit Act Chapter 69:01 of the laws of Trinidad and Tobago. Part III of the Exchequer and Audit Act specifies these duties listed here under:

1. The Auditor General shall not be capable while holding the said office of holding any other Office of emolument in the service of the State.
2. (1) Save as is otherwise provided for in the Constitution the provisions of the law and regulations in force relating to the public service shall apply to the Auditor General.
(2) Where the Auditor General is removed from office under the Constitution the Minister shall make a full statement of the reasons therefore at the first opportunity to Parliament.
3. (1) The Auditor General shall examine, inquire into and audit the accounts of all accounting officers and receivers of revenue and all persons entrusted with the assessment of, collection, receipt, custody, issue of payment of public moneys, or with the receipt, custody, issue, sale, transfer or delivery of any stamps, securities, stores or other State property.
4. The Auditor General shall satisfy himself that -
 - (1) all reasonable precautions have been taken to safeguard the collection of public moneys and that the laws, directions and instructions relating thereto have been duly observed;

- (2) all issues and payments were made in accordance with proper authority and that all payments were properly chargeable and are supported by sufficient vouchers or proof of payment;
- (3) all money expended has been applied to the purpose or purposes for which the same was granted by Parliament and that such expenditure conforms to the authority which governs it and has been incurred with due regard to the avoidance of waste and extravagance;
- (4) essential records are maintained and the rules and procedures framed and applied are sufficient to safeguard the control of stores and other State property.

Overview of the Audit Process

Engagement

The Auditor General can be engaged to conduct audits in the following ways:

1. For the audit of Ministries and Departments of the government of the Republic of Trinidad and Tobago, the Exchequer and Audit Act section 9(1) mandates the Auditor General to conduct these audits.
2. In many instances the statute (law) setting up a Statutory Body or Authority indicates that the Auditor General shall be the auditor. In some instances, the Auditor General is allowed the freedom to appoint an auditor who would submit reports through the Auditor General.
3. Some statutory bodies, which have the prerogative to appoint auditors in their own right, appoint the Auditor General to conduct the audit.
4. At times International Financial Institutions require that the Auditor General's Department conduct the audits of projects funded by loan from these institutions.

Issues, Observations and Recommendations

During the Committee's follow up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee on the concerns raised in Report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries (MEEI), the following issues were identified, observations made and recommendations proposed:

1. The MEEI's Lack of Responsiveness to the PAC

Throughout 2022, the MEEI was unable to fully engage with the Committee as required for this inquiry. The Committee initially sent questions for written submission to the MEEI on January 24, 2022 based on the Ministerial Responses to the Committee's 30th Report, 11th Parliament. The responses to the questions were received on March 16, 2022.

In line with the Committee's established inquiry process (see page 9 above), the Committee determined that a public hearing should be held in light of the issues raised in the MEEI's written submission. However, this public hearing was only held one (1) year after the Committee's receipt of the MEEI's submission – on March 22, 2023. During the intervening period, the public hearing was rescheduled numerous times. This was due, in large part, to the unavailability of the MEEI officials. In the interest of maintaining the momentum of the inquiry given the lengthy delay in holding the required public hearing, the Committee eventually sent a further request for written submission to the MEEI on December 21, 2022. However, these questions were based on the MEEI's March 2022 submission which remained unanswered as at the time of the public hearing.

This matter was raised at the public hearing. The Committee noted its disappointment at what it perceived to be a lack of regard for its mandate by the MEEI. The Ministry assured the Committee that this was not the case and cited multiple competing engagements as the reason for its prolonged inability to engage with the Committee as normally required.

Observation:

- i. In addition to its constitutional mandate (Section 119(4)) to consider and report to the House of Representatives on reports of the Auditor General on the public accounts,*

the Committee reiterates - in light of the MEEI's unresponsiveness to its requests throughout 2022 - its powers to "send for persons, papers and records" granted under Standing Orders 111 and 101 of the House of Representatives and the Senate respectively.

2. The MEEI's Implementation of the Auditor General's Recommendations

There was only modest progress in the MEEI's implementation of the Auditor General's recommendations over the past four (4) years. The previous 11th Parliament PAC inquiry - which forms the basis for this follow-up inquiry - was conducted in 2019. At the follow-up public hearing, the Committee noted many similarities between the issues raised and the reported status of progress in those areas in the written and oral statements made by the MEEI in 2019 and those made in 2022 and 2023. It appeared, therefore, that the Auditor General's recommendations were not receiving considerable buy-in from the MEEI.

Acknowledging this issue, the MEEI affirmed that progress had indeed been made. For example the recommended strengthening of the Ministry's human resource complement was given to highlight the progress made by the Ministry. The MEEI further explained that, based on its review of recommendations received from the Auditor General, appropriate action was determined at the point in time based on relevant ongoing Work Plans under the Ministry's existing Strategic Plan. Matters addressed in recommendations that were not provided for in the Work Plan were then earmarked for incorporation into the Ministry's next Strategic Plan, which was under development at the time of the Committee's public hearing. This approach of incorporating matters related to recommendations to be implemented into the Ministry's Strategic Plan was presented as a means of ensuring what the MEEI's representatives referred to as "sustainable" as opposed to what would otherwise be "piecemeal" implementation.

Recommendation:

- i. The MEEI should report to Parliament on the incorporation of specific matters arising from the Reports of the Auditor General into the Ministry's next Strategic Plan by January 29, 2024.***

3. The MEEI's Implementation of the Production Verification Committee's Recommendations

The MEEI did not implement all of the recommendations made by the Production Verification Committee (PVC). The MEEI established the PVC to review the Ministry's existing production verification system currently and to recommend improvements. Examples of the practice in numerous other oil and gas producing jurisdictions were noted to draw comparison to corresponding systems in Trinidad and Tobago.

The PVC's report was completed and submitted to the MEEI in October 2020. As indicated in the MEEI's written submission to the Committee, the following was the status of the Ministry's implementation of the PVC's recommendations as at March 2022:

IMPLEMENTED	IN PROGRESS	NO STATUS PROVIDED
<ol style="list-style-type: none"> 1. Review the linkage between production data and the measurement systems utilized to derive them. 2. Develop a policy/guideline with respect to measurement systems. 3. Tailor the inspection programme to include review of Pipeline and Instrumentation diagrams (P&ID's) as it relates to the measurement system. 	<ol style="list-style-type: none"> 1. Review Trinidad's Petroleum regulations to properly regulate production verification and measurement systems for oil and gas. 2. Develop work/process flows for all tasks carried out in the Division. 3. Improve the operational efficiency of the EDH System. 4. Consideration on expanding the audit scope to include E&P Licenses. 	<ol style="list-style-type: none"> 1. Document the process map currently in place to address discrepancies noted in production data after reconciliation. The procedure should also include means to capture response from operators when Contract Management Division raises queries. 2. Review the MEEI's legal framework to determine whether it will allow for the introduction of penalties/fines for amendments submitted more than 3 months

		<p>from the submission of the Production data. If it does, introduce penalties/fines to deter Operators from tardy submissions of amendments to production data.</p> <ol style="list-style-type: none"> 3. Sufficiently staff and train audit personnel in order to conduct oil and gas production data audits. 4. Assign the duty of coordinating the production verification process amongst the different Divisions to the post of Chief Technical Officer (CTO) or the Deputy Permanent Secretary in absence of a CTO.
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At the public hearing, officials from the MEEI explained that deliberations were still ongoing about how to implement the PVC’s recommendations for which no status update was provided in its written submission.

Recommendation:

- i. The MEEI should submit a status update to Parliament by January 29, 2024 including the following:*

- a. *The expected completion timeline for the implementation of the PVC recommendations which were classified as “in progress” in March 2022; and*
- b. *The obstacles hindering action on the recommendations for which no status was given in March 2022 and the possible way forward to overcome those obstacles.*

4. Strengthen the Human Resource Capacity

The MEEI made progress in strengthening its staff complement and capacities to effectively address revenue leakages.

Training

The Auditor General recommended that the MEEI conduct a manpower audit in order to determine and equip itself with the staff competencies required to close revenue leakages in the areas of economic activity under the Ministry’s purview. In its Ministerial Response to the 30th PAC Report, the MEEI indicated that, in line with this recommendation, training was ongoing “to enhance and equip staff with the relevant competencies related to measurement”⁸. The MEEI further explained in its subsequent 2022 written submission to the Committee that six (6) of its staff members received such training in 2021 resulting in strengthened capacity for the measurement of production levels, in line with international petroleum industry best practice. At the time of the public hearing, approximately \$1 million had been spent on training for MEEI technical officers since 2019.

Recruitment

The Auditor General noted a shortage of Petroleum Inspectors at the MEEI. As these established public service posts were not all filled, the MEEI engaged contract officers to fulfil those responsibilities. In its 2022 written submission, the MEEI explained that whereas there were fourteen (14) Petroleum Inspectors on hand as at March 2022, the Ministry planned to recruit eleven (11) contract officers by September 2022⁹.

⁸ Parliament website. Accessed July 20, 2023: <https://www.ttparliament.org/wp-content/uploads/2021/11/p12-s1-J-20201005-PAC-mr30-MEEI.pdf>

⁹ MEEI written submission dated March 16, 2022, page 6.

At the public hearing, the officials from the MEEI also indicated that, over the previous three (3) years, around eighty percent (80%) of the Ministry's permanent vacancies had been filled across posts such as Minerals Inspector, Petroleum Inspector, Geoscientists and Engineers. Efforts were ongoing to continue to fill these permanent vacancies for which the Ministry previously relied on contract officers. The MEEI acknowledged that it was crucial to fill the remaining twenty percent (20%) of vacancies as the positions concerned were often key roles requiring unique skill sets.

Observation:

- i. The Committee emphasizes the importance of filling all of the MEEI's key specialised positions in the interest of avoiding prolonged adverse effects on the Ministry's ability to fulfil its mandate, and therefore welcomes the ongoing recruitments efforts.*

Recommendation:

- i. The MEEI should report to Parliament on the status of its efforts to fill all established public service posts relevant to addressing revenue leakages, including positions filled and those not yet filled as well as the reasons for some positions not being filled, by January 29, 2024.*

5. Illegal Quarrying

The MEEI was in the process of strengthening its efforts to address illegal quarrying through inter-agency collaboration, the implementation of technological solutions and updating the relevant regulations.

Multi-Agency Task Force (MATF)

The MEEI indicated that, since the Committee's 2019 inquiry, a total of eighteen (18) persons had been arrested and charged in connection with four (4) instances of illegal mining¹⁰. These arrests were made possible through the work of the MATF established in 2019 consisting of representatives of the Trinidad and Tobago Police Service (TTPS), the MEEI, the Commissioner of State Lands (COSL) and other key partners with land-related mandates. These matters were before the court as at April 2023.

¹⁰ MEEI written submission dated April 20, 2023, pages 1-2.

In its August 2020 Ministerial Response to the PAC's 30th Report, the MEEI stated that it was in the process of developing a system to estimate the quantity of minerals and materials lost to illegal quarrying. This was being done in collaboration with the TTPS, the COSL and the Conservator of Forests. However, in its March 2022 written submission to the Committee, the MEEI explained that no progress had been made in the development of such a system.

Technological Solutions

At the public hearing, the MEEI representatives detailed the Ministry's soon to be concluded efforts to procure services for the conduct of aerial surveys of lands throughout Trinidad and Tobago. No aerial imaging data has been collected since a 2014 exercise conducted by the Surveys and Mapping Division of the Ministry of Agriculture, Land and Fisheries (MALF).

As the technology needed to carry out such surveys was not on hand at the MEEI, the Ministry relied on open source data via Google Earth. Although this data was freely available, the MEEI had no control over when it was collected. The newly collected data was therefore necessary to enable the MEEI to establish its own new baseline images of lands being quarried legally. This would facilitate the identification of lands being quarried without the requisite licences.

The MEEI also noted the potential for the use of satellite technology - as already used by other public agencies - to detect illegal quarrying. The Ministry already have staff on hand trained in geomatics engineering who could drive initiatives in this area.

Minerals Regulations

At the public hearing, the MEEI indicated that the quarrying licensing regime was expected to be streamlined within 2023. The Ministry's Minerals Regulations were reviewed with a view to making the licensing process less cumbersome. The assumption was that making it easier for prospective quarrying operations to become licensed would mean that less people would resort to operating without licenses. The reviewed Regulations were receiving the attention of the Law Reform Commission of the Office of the Attorney General and Ministry of Legal Affairs at the time of the Committee's public hearing.

Observation:

- i. The Committee notes the slow pace of progress towards the conduct of the aerial surveys of lands. This initiative was similarly described as ongoing at the time of the 2019 public hearing that led to the publication of the 30th Report of the 11th Parliament PAC. This serves as further illustration of the concerns raised at Issue 2 – ‘MEEI Implementation of Auditor General Recommendations’ of this Report.*

Recommendation:

- i. The MEEI should submit a status update to Parliament by January 29, 2024 including the following:*
 - a. An indication of whether any decision was reached in the legal proceedings related to the four (4) identified cases of illegal quarrying for which eighteen (18) persons were arrested;*
 - b. The expected timeline for the conclusion of the procurement process for aerial surveying services and the estimated cost of this procurement;*
 - c. A brief description of the ways in which satellite technology has been used to detect illegal quarrying in other jurisdictions and the applicability of this approach in Trinidad and Tobago;*
 - d. Confirmation of whether the updated Minerals Regulations have been approved by the Law Reform Commission; and*
 - e. The status of the stated efforts to develop a system to estimate the quantity of minerals and materials lost to illegal quarrying.*

Concluding Remarks

The Committee notes the MEEP's ongoing initiatives to address revenue leakages as highlighted in various Reports of the Auditor General. However, considerable effort must be made to expedite processes to ensure that the Auditor General's well-founded and longstanding recommendations are duly implemented so that the relevant deficiencies can be remedied. This is all the more crucial given the prominence of energy-related productive activity to overall national revenues. The Committee also looks forward to more robust engagement with a more responsive MEEI in the context of its inquiries, as there will be ongoing follow-up into the recommendations made in this Report.

This Committee respectfully submits this Report for the consideration of the Parliament.

Sgd.
Mr. Davendranath Tancoo
Chairman

Sgd.
Ms. Jearlean John
Vice – Chairman

Sgd.
Dr. Amery Browne
Member

Sgd.
Mrs. Ayanna Webster-Roy
Member

Sgd.
Mr. Adrian Leonce
Member

Sgd.
Mrs. Paula Gopee-Scoon
Member

Sgd.
Mr. Roger Monroe
Member

Appendix I - Witnesses

At the public hearing held on March 22, 2023, the witnesses attending on behalf of the Auditor General's Department and the Ministry of Energy and Energy Industries were:

Auditor General's Department

- Mr. Shiva Sinanan - Assistant Auditor General
- Mrs. Michelle Superville- Craigwell - Audit Executive I (Ag.)
- Mr. Mukesh Belgie - Audit Manager (Ag.)

Ministry of Energy and Energy Industries

- Mrs. Penelope Bradshaw-Niles - Permanent Secretary
- Mr. Marc Rudder - Director, Petroleum Operations
Management
Division
- Mr. Monty Beharry - Director of Minerals
- Ms. Candice De Gale - Manager, Energy Data Operations

**THE PUBLIC ACCOUNTS COMMITTEE –
THIRD SESSION, TWELFTH PARLIAMENT
MINUTES OF THE THIRTEENTH MEETING HELD ON WEDNESDAY
MARCH 22, 2023 AT 10:06 A.M. IN THE J. HAMILTON MAURICE MEETING
ROOM, GROUND FLOOR, CABILDO BUILDING, PARLIAMENTARY
COMPLEX, ST. VINCENT STREET, PORT OF SPAIN**

Present were:

Mr. Davendranath Tancoo	-	Chairman
Ms. Jearlean John	-	Vice-Chairman
Mr. Adrian Leonce	-	Member
Mrs. Ayanna Webster-Roy	-	Member
Ms. Charrise Seepersad	-	Member
Mr. Roger Monroe	-	Member
Dr. Amery Browne	-	Member
Ms. Keiba Jacob-Mottley	-	Secretary
Ms. Khisha Peterkin	-	Assistant Secretary
Mr. Justin Jarrette	-	Graduate Research Assistant
Ms. Celeste Reece	-	Procedural Officer Intern
Ms. Teneka Carrington	-	Parliamentary Researcher Intern

Excused were:

Mrs. Paula Gopee-Scoon	-	Member
Mr. Adrian Leonce	-	Member

COMMENCEMENT

- 1.1 At 10:06 a.m., the Chairman called the meeting to order and welcomed those present. The Chairman informed Members that Mrs. Paula Gopee-Scoon and Mr. Adrian Leonce asked to be excused from the Meeting.

EXAMINATION OF THE MINUTES OF THE TWELFTH MEETING

- 2.1 The Committee examined the Minutes of the Twelfth (12th) Meeting held on Wednesday February 15, 2023.
- 2.2 There being no omissions or corrections, the Minutes were confirmed on a motion moved by Ms. Charrise Seepersad and seconded by Dr. Amery Browne.

MATTERS ARISING FROM THE MINUTES OF THE TWELFTH MEETING

- 3.1 With reference to item 3.2, page 2 the Chairman informed Members that the Committee's approved Work Programme for the Third Session, Twelfth Parliament was uploaded to the Rotunda (e-repository).
- 3.2 With reference to item 8.2, page 5, the Chairman informed Members that questions for additional information were sent to the Children's Authority of Trinidad and Tobago on February 28, 2023. The deadline for submission of responses for additional information was on March 15, 2023. On March 15, 2023, the Director of the Children's Authority requested an extension to submit the responses to March 31, 2023.

PRE-HEARING DISCUSSIONS RE: FOLLOW UP ON THE IMPLEMENTATION OF THE RECOMMENDATIONS MADE IN THE COMMITTEE'S THIRTIETH REPORT WITH REFERENCE TO THE CONCERNS RAISED IN REPORT OF THE AUDITOR GENERAL ON THE PUBLIC ACCOUNTS OF THE REPUBLIC OF TRINIDAD AND TOBAGO WITH SPECIFIC REFERENCE TO THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES

- 4.1 The Chairman informed Members that the purpose of the public hearing was to follow up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee.
- 4.2 The Chairman outlined the remit of the inquiry.
- 4.3 The Chairman invited Members to review the Issues Paper prepared by the Secretariat. Members were informed that the Ministry of Energy and Energy Industries did not provide a response to the request for written submission, despite numerous attempts to obtain the written responses.
- 4.4 The Chairman invited Members to raise any issues or questions on the recommendation made in the Committee's Thirtieth Report. Members discussed the issues of concern and the general approach for the public hearing.

SUSPENSION

- 5.1 There being no further business for discussion *in camera*, the Chairman suspended the meeting at 10:22 a.m.

FOLLOW UP ON THE IMPLEMENTATION OF THE RECOMMENDATIONS MADE IN THE COMMITTEE'S THIRTIETH REPORT WITH REFERENCE TO THE CONCERNS RAISED IN REPORT OF THE AUDITOR GENERAL ON THE PUBLIC ACCOUNTS OF THE REPUBLIC OF TRINIDAD AND TOBAGO WITH SPECIFIC REFERENCE TO THE MINISTRY OF ENERGY AND ENERGY INDUSTRIES

- 6.1 The Chairman called the public meeting to order at 10:32 a.m.

6.2 The following officials joined the meeting:

Auditor General's Department (AGD)

- Mr. Shiva Sinanan - Assistant Auditor General
- Mrs. Michelle Superville-Craigwell - Audit Executive I (Ag)
- Mr. Mukesh Belgie - Audit Manager (Ag)

Ministry of Energy and Energy Industries (MEEI)

- Mrs. Penelope Bradshaw- Niles - Permanent Secretary
- Mr. Mark Rudder - Director, Petroleum Operations Management
- Mr. Monty Beharry - Director of Minerals
- Ms. Candace De Gale - Manager, Energy Data Operations

6.3 **Key Topics Discussed:**

1. The important role of the price of oil and gas as a source of national revenue;
2. The challenges faced by Committee in attaining information from the Ministry of Energy and Energy Industries (MEEI);
3. The status of progressive collaborative initiatives conducted by the MEEI, the Trinidad and Tobago Police Service (TTPS) and the Commissioner of State Lands (COSL) to curb illegal quarrying since 2019;
4. The work of the Multi-Agency Taskforce established in 2019 on illegal quarrying and the legal action taken to date against persons involved in illegal quarrying;
5. The reasons for the delays in the MEEI procuring technology required to detect illegal quarrying;
6. The MEEI's procurement of services for the conduct of an aerial survey of lands to identify areas affected by illegal quarrying;
7. The status of the MEEI's review of the Minerals Regulations with respect to streamlining the quarry licensing process;
8. The MEEI's investments since 2019 in research on new methods or technologies that could assist in locating illegal quarrying;
9. The extent to which the findings and recommendations in the Auditor General's Reports influence the MEEI's initiatives and;
10. The obstacles to the MEEI's implementation of the AGD's recommendations;
11. The status of the MEEI's implementation of the recommendations made in the Production Verification Committee (PVC)'s Production Verification Report;
12. The status of and challenges encountered by the MEEI in implementing and operating the Energy Data Hub System;
13. The AGD's expansion of the audit scope to include Exploration and Production Licenses;
14. The penalties incurred for breach of license;
15. The MEEI's audit of Production Sharing Contracts;

16. The MEEP's strengthening of its staffing since 2019 through the recruitment of Minerals Inspectors, Petroleum Inspectors, geo-scientists and engineers;
17. The MEEI's determination of its human resource capacity;
18. The sum spent by the MEEI on training for its technical officers since 2019;
19. The status of the digitalization of the MEEI's operations;
20. The ways in which the Ministry ensures that gas losses are within the agreed limits as set in the production contracts; and
21. The challenges faced by the MEEI in retaining trained staffed due to the competitive nature of the energy sector.

Please see Verbatim Notes for the detailed oral submission by the witnesses.

7.1 The Chairman thanked the officials for attending the meeting and they were excused.

SUSPENSION

8.1 At 12:11 p.m., the Chairman suspended the public meeting to resume in-camera for a post-mortem discussion with Members only.

RESUMPTION

9.1 At 12:15 p.m., the Chairman resumed the meeting in camera.

POST-MORTEM DISCUSSION

10.1 The Chairman sought Members' views on the public hearing. A discussion ensued.

10.2 The Committee agreed that additional questions would be sent to the MEEI.
[Please see Appendix 1]

ADJOURNMENT

11.1 There being no other business, the Chairman thanked Members for their attendance and the meeting was adjourned to April 26, 2023 at 10:00 a.m.

11.2 The adjournment was taken at 12:18 p.m.

We certify that these Minutes are true and correct.

CHAIRMAN

SECRETARY

March 22, 2023

Appendix to Minutes

Request for Additional Information – Questions to the MEEI

Follow up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee with reference to the concerns raised in Reports of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries.

Issue: Illegal Quarrying:

1. Indicate the number of persons arrested and charged for illegal quarrying since 2019.

Issue: Production Verification Committee:

1. Provide the status as at March 2023 of the MEEP's implementation of all recommendations made in the Production Verification Committee's October 2020 Production Verification Report.

Appendix III – Verbatim Notes

VERBATIM NOTES OF THE THIRTEENTH MEETING OF THE PUBLIC ACCOUNTS COMMITTEE HELD (IN PUBLIC) IN THE J. HAMILTON MAURICE MEETING ROOM, GROUND FLOOR, CABILDO PARLIAMENTARY COMPLEX, OFFICE OF THE PARLIAMENT, ST. VINCENT STREET, PORT OF SPAIN, ON WEDNESDAY, MARCH 22, 2023, AT 10.32 A.M.

PRESENT

Mr. Davendranath Tancoo	Chairman
Ms. Jearlean John	Vice-Chairman
Dr. Amery Browne	Member
Ms. Charrise Seepersad	Member
Mrs. Ayanna Webster-Roy	Member
Mr. Roger Monroe	Member
Ms. Keiba Jacob Mottley	Secretary
Ms. Khisha Peterkin	Assistant Secretary
Mr. Justin Jarrette	Graduate Research Assistant
Ms. Celeste Reece	Procedural Officer Intern
Ms. Teneka Carrington	Parliamentary Research Intern

ABSENT

Mrs. Paula Gopee-Scoon	Member
Mr. Adrian Leonce	Member

AUDITOR GENERAL'S DEPARTMENT

Mr. Shiva Sinanan	Assistant Auditor General
Mrs. Michelle Superville-Craigwell	Audit Executive I (Ag.)
Mr. Mukesh Belgie	Audit Manager (Ag.)

MINISTRY OF ENERGY AND ENERGY INDUSTRIES

Mrs. Penelope Bradshaw-Niles	Permanent Secretary
Mr. Marc Rudder	Director, Petroleum Operations Management Division
Mr. Monty Beharry	Director of Minerals
Ms. Candice De Gale	Manager, Energy Data Operations

Mr. Chairman: Good morning and welcome to the officials from the Ministry of Energy and Energy Industries and from the Auditor General's Department. My name is Davendranath Tancoo and I am the Chairman of the Public Accounts Committee. Before I introduce or ask my other colleagues to introduce themselves, I would like to start by advising that the Public Accounts Committee has a mandate to consider and to report to the House on:

- a. appropriation accounts of moneys expended out of sums granted by Parliament to meet the public expenditure of Trinidad and Tobago;
- b. such other accounts as may be referred to the Committee by the House of Representatives or as are authorized or required to be considered by the Committee under any other enactment; and

- c. the report of the Auditor General on any such accounts and whether policy is carried out efficiently, effectively and economically and whether expenditure conforms to the authority which governs it.

The purpose of today's meeting is for the Public Accounts Committee to follow-up on the implementation of the recommendations made in the Thirtieth Report of the Public Accounts Committee with reference to the concerns raised in the report of the Auditor General on the Public Accounts of the Republic of Trinidad and Tobago with specific reference to the Ministry of Energy and Energy Industries and to determine the challenges being faced by the Ministry of Energy and Energy Industries in implementing the Committee's recommendations and treating with the issues raised by the Auditor General. Based on those issues identified the following key stakeholders were invited to today's session: the Auditor General's Department and the Ministry of Energy and Energy Industries.

Please be advised as well that this meeting is being broadcast live on the Parliament's Channel 11, on Radio 105.5 FM and the Parliament's YouTube channel *ParView*. Viewers and listeners are welcome to send their comments related to today's enquiry via email, parl101@tpparliament.org, via [Facebook.com/tpparliament](https://www.facebook.com/tpparliament) and via Twitter [@tpparliament](https://twitter.com/tpparliament). I would now ask my colleagues, members of the Committee present here today to introduce themselves beginning with my colleague on my right. Member John.

[Introductions made]

Mr. Chairman: Just for reference we are also joined by members of the Secretariat who are present with us here today to take notes and to provide guidance going forward. May I also now ask members of the representatives from the Auditor General's Department and from the Ministry of Energy and Energy Industries to introduce themselves. We will begin with the Auditor General.

[Introductions made]

Mr. Chairman: Thank you. May I have the representatives from the Ministry of Energy and Energy Industries introduce yourselves, Ma'am.

[Introductions made]

Mr. Chairman: Thank you all. May I also use this opportunity—so welcome. May I also use this opportunity to afford the Auditor General's Department to make a brief opening statement as we proceed.

Mr. Sinanan: Thank you, Mr. Chairman. The Ministry of Energy and Energy Industries plays a major role in the management of the natural resources of the nation, oil, gas and aggregate. The nation's main source of revenue is the oil and gas sector. The Auditor General has always been cognizant of the significance of the energy industry in our economy, as they just this year gone by produced 53 per cent of our revenue. In this regard, arising out of the last meeting held on the 27th of November, 2019, the following areas were examined in more detail: Internal audit, revenue, production, receipts and disbursements. Thank you.

Mr. Chairman: Thank you very much. May I invite the Ministry of Energy and Energy Industries to make a brief opening statement, please.

Mrs. Bradshaw-Niles: Good morning again, Chairman, and the other members of the Committee, and also to the viewing audience. The Ministry of Energy and Energy Industries is responsible for the overall management of the oil, natural gas and mineral sectors in Trinidad and Tobago. These sectors are significant contributors to the GDP of the country and therefore revenues generated from the energy sector are unarguably critical. The team from this Ministry here today is prepared to provide a status on the implementations of recommendations of the PAC and to provide any clarification that may be necessary to understand the systems utilized by the Ministry in the regulation of the industry. On a continuous basis we have been focused on optimizing our systems and since the Ministry last met with the Public Accounts Committee, we have undertaken several initiatives in

the area of human resources, addressing staffing issues, in the mineral sector, including a review of the minerals regulations and in the oil and gas sector, reviewing our systems and increasing collaboration between divisions. Thank you.

Mr. Chairman: Thank you very much, Ma'am. The process we would follow is that I would normally introduce the first set of questions and then open the floor to my colleagues for various rounds of questions. So allow me to begin, firstly, by expressing my significant concern having read the report, the Thirtieth Report of the Public Accounts Committee which you referenced earlier. Having read that report and then having had several attempts to host this meeting over the last few months, I must register my grave concern that we seem to have the same problem that we did in 2019, which is, accessing information from the Ministry of Energy and Energy Industries by the Public Accounts Committee. That raises a grave concern for us because as a citizen based on what you just said, my colleague at the Auditor General's Department has indicated, 53 per cent of the revenue of Trinidad and Tobago comes from the energy sector. And therefore, it is in the Committee's interest to ensure that all concerns and queries and issues and challenges that the Ministry may have, are addressed as urgently as possible.

But there seems to be a different challenge and I want to if I may be allowed to read into the record a timeline so that I think members of the viewing public and your good selves could understand the genesis of my frustration with regard to getting information to the Public Accounts Committee, not just from 2019 which was expressed in the last report, but even today. The following, and I am reading the report as is just for the record at this point. The following is a timeline of the PAC's Secretariat's communications with the Ministry of Energy and Energy Industries to request written responses and to schedule a public hearing for this follow-up enquiry. And this is just a follow-up enquiry. This is not the primary enquiry which took place 2018/2019. This is a follow-up from four years ago.

Date: 24th of the 1st, 2022, PAC wrote to the Ministry with request for written submissions with a deadline of the 4th of the 2nd, 2022; 16th of the 2nd, 2022, a meeting was rescheduled to the 9th of the 3rd, 2022; 7th of the 3rd, 2022, the Ministry indicated their inability to attend on the meeting of the 9th and requested an extension to the 18th of the 3rd to submit written responses; 8th of 3rd, 2022, the meeting was rescheduled to the 23rd of the 3rd, 2022; 18th of the 3rd, 2022, meeting rescheduled to the 13th of the 4th, 2022; 13th of the 4th, 2022, meeting postponed; 4th of the 5th, 2022, meeting rescheduled to the 11th of the 5th, 2022 and then postponed; 16th of the 11th, 2022, meeting scheduled for the 30th of the 11th, 2022; 30th of the 11th, 2022, meeting rescheduled to the 14th of the 12th, 2022; 14th of the 12th, that particular one was rescheduled on our request because of a sitting of the House of Parliament; 21st of the 12th, 2022, an updated request for written submissions was sent to the Ministry of Energy and Energy Industries with a deadline of the 6th of the 1st, 2023.

That is a substantial amount of attempts by the Secretariat to get information from the Ministry of Energy and Energy Industries. No written submission has been received from the Ministry of Energy and Energy Industries to date, that is today, March 22nd, no written submissions have been received from the Ministry of Energy and Energy Industries to date. Our Secretariat advised that they followed up on the 24th of the 1st, 2023 and throughout February and March 2023.

The question I have therefore, and it is a matter of grave concern, because this reflects the exact issues that were raised—I have other members of the Committee here who were part of this Fifth Session of Parliament, the Thirtieth Report was prepared then, and they said that basically they had the same issues then, where the Ministry seems to be lax in submitting information and that is an issue of concern given the importance of the Ministry of Energy and Energy Industries to the national community and to the gross domestic product of this country.

My questions, can you please advise, Madam Permanent Secretary, who is the individual or entity or department responsible for preparing and approving the Ministry's responses to the

Committee, to the Public Accounts Committee of the Republic of Trinidad and Tobago?

Mrs. Bradshaw-Niles: Chair, I am the person responsible and I do apologize.

Mr. Chairman: Ma'am, can you advise, and apologies are acceptable, but can you advise why, because this is a situation that existed in 2019. So we are looking at 2020, 2021, 2022, 2023 and the issue seems to be the same. We cannot seem to get information from the Ministry of Energy and Energy Industries. I do not know if there are specific challenges that you are facing and if there are, Ma'am, the purpose of the Committee as stated in my opening statement was to assist the Ministry in addressing the very challenges that you may have. So, Ma'am can you advice, Madam Permanent Secretary, if there are specific challenges and what they are?

Mrs. Bradshaw-Niles: So thank you very much, Chair. And I just want to indicate that my records have that we did submit prior to your—between 2019 and now two sets of written submissions and what was required over the last year was a follow up to that. So we did—between 2019 and now, we did submit two sets of written information. So just to clarify that—

Mr. Chairman: And that is fine. The references that I was making was from 2022—

Mrs. Bradshaw-Niles: Yeah.

Mr. Chairman: So, like I said there are two issues there, one, is the failure to come before the Committee which would have dealt with some issues that we would want to raise today in any case, but the other one was the issue of not responding to the secretariat of the Public Accounts Committee. And I referenced 2022 and 2023. So you may have submitted documentation prior to that, but we were asking for updated information and specific queries were provided which would have informed us today, better informed us today so we would be in position, an informed position. It feels, quite frankly, as if the Ministry of Energy and Energy Industries does not have regard for the Public Accounts Committee and our requests for information.

Mrs. Bradshaw-Niles: So I just want to say that that is indeed not the case. We have been following up and working on several fronts just to fulfill the core mandate which is to increase the revenues and to ensure that the industry was properly managed throughout the course of the COVID. So I do not want to provide any excuses because, of course, reporting to this Committee is just as important a mandate. But in terms of challenges I just want to say that we have been working on several fronts in terms of renewable energy, our core business in terms of increasing gas production, looking at the revenues, renegotiating in different areas and also, of course, the mineral sector. So part of the challenges has been, of course, having multiple—for several of the sessions, multiple engagements at the same time. And therefore, we have been working with Ms. Jacob Mottley in terms of getting a suitable date. But I do want to say that we are here today and we are at your full disposal to answer any request or any questions or queries that you may have.

Mr. Chairman: Thank you very much, Madam Permanent Secretary and we will hold you to that today. I want to ask just a couple of questions at the start. We have several issues, there are basically two issues that I think we would be championing today based on the information before us and one will deal specifically with the energy component, and the other side will deal with the quarrying issues. I want to start at the end, which is the quarrying issues. As somebody who was involved in the construction industry for quite a while, I am aware of reports in the media at least and from suppliers that there exists a substantial amount of illegal quarrying.

On your last time that you were present here there was an indication that some things were going to be put in place. Unfortunately, as I said, and I will belabour the point, we did not have a feedback as to the questions we would have raised which is what we hope that you would provide some answers for today. But you were supposed to engage in some kinds of activities then based on the recommendations of the Auditor General's Reports over the period. You had indicated some aspects, some use of the unmanned, the drones. Those things came out of the 2019 documentation.

So there was a projection going forward from 2019 that several things were going to be done

which will make the issue, this long-standing issue of illegal quarrying a matter that fetches the full attention of the State and of the relevant security agencies so that we could have dealt with that effectively. I want to use the opportunity and give you the opportunity today, now, to provide some sort of information and feedback to your Committee and to the general public, by extension, as to what exactly has been done to treat with this scourge of illegal quarrying between 2019 and today?

Mrs. Bradshaw-Niles: Thank you very much, Chair. So we addressed it on several different fronts. The first is that in terms of the actual illegal quarrying, what we have done is increased our collaboration between the different, the Ministry of Energy and Energy Industries, the Commissioner of State Lands and the police, the TTPS in terms of actually dealing with illegal quarrying on the ground, all right? So that is one area that we addressed. Another area that we are currently implementing is that we actually went out for a tender to get a survey of the lands, an aerial survey, so that we can look at the lands which are currently under licences and thereby by elimination be able to determine which are the lands which are illegally quarried and the letter of award is actually, will be issued today in terms of that. So that is another process that we are going through.

So based on our current licences and the information that we have internally, we will be able to determine if we are seeing areas that are quarried and it is not within the licensed area, we would know that they are illegally quarried and therefore we will be able to identify that. So that is another area that we have addressed.

The third area that we have worked really hard on since 2020 is looking at the whole areas of licensing of quarries. And with that what we have done is that we have reviewed the regulations in terms of streamlining the actual process for applications and renewals of applications and we came up with a comprehensive list of recommendations in terms of areas of the regulations to be revised and that is currently before the LRC. And we expect during 2023 that we will be able to streamline the licensing of quarries based on the recommendations that we have made for changes to the mineral regulations. So those are the three very broad areas that we think would have a significant impact on illegal quarrying in Trinidad and Tobago. If you have further questions I will ask the Director of Minerals to give more details.

Mr. Chairman: In 2019 you had indicated a desire to have this increased collaboration and you have indicated that you have in fact done so at this point, you have set up an agency of some sort where we have all these players at the same desk. On the basis of that interaction and that combined effort from the various state agencies and the police service, can you advise whether anybody has been charged with illegal quarrying, to date? Has there been any instance where there has been legal action pending against illegal quarrying?

Mr. Beharry: Chair, yes, based on the information that we would have received from Multi-Agency Task Force. The Multi-Agency Task Force is a task force that was set up by the Commissioner of Police around October 2019, comprising members of TTPS, members of the defence force, as well as members of several of the key Ministries involved with responsibility for land, et cetera. There have been persons based on complaints received of illegal quarrying that were investigated, caught in the act and the TTPS officers are currently dealing with those persons at various stages.

Mr. Chairman: So there have been arrests and charges between 2019 and today?

Mr. Beharry: Yes, that is the information I would have received from the TTPS.

Mr. Chairman: Thank you. Can you give us an idea about the—I am trying to gauge the extent of the illegal activity compared to the legal activity. So can you give us an indication of how many persons have been charged and how many quarries have been deemed illegal and therefore their operations ceased?

Mr. Beharry: Okay. I do not have that specific information at this point but we can provide that to you.

Mr. Chairman: That is the response I was hoping not to get. And the reason for that is our own

experience of not getting information forthcoming from the Ministry. So, if I may, again, just to tie you because we are now in public, can you give me a time frame within which that information can be presented to your Committee?

Mr. Beharry: Okay. I will have to communicate with the head of the Multi-Agency Task Force and obtain that information. I would not like to give you a specific time frame as the information would reside with the TTPS. But as soon as we receive the information we will forward it to the Committee.

Mr. Chairman: Thank you. You also had indicated previously, so just for clarification, there have been instances when quarries have been deemed illegal or illegally in operation and have been stopped from continuing operation. Am I correct to say that?

Mr. Beharry: Yes. The Multi-Agency Task Force would have addressed some of those issues.

Mr. Chairman: All right. I will open the floor and allow my other colleagues, because I know this is a topical issue and other colleagues may have questions that they would want to ask. Colleagues.

Ms. John: Not on this one particularly. So, if anyone else on the Committee wants to do that, I want to ask them on a different area, please.

Mr. Chairman: Yes, please. Member Seepersad.

Ms. Seepersad: Thank you, Chairman. Just help me to understand, is it that you have not been taking aerial photographs of the topography of Trinidad and Tobago periodically and comparing it to see changes that could point you to legal and illegal quarrying that you all would review on a periodic basis and then send people out to investigate what the findings are, et cetera?

Mr. Beharry: Through you, Chair. The aerial photography, and that is a specific thing itself. The last record of aerial photography taken by the Director of Surveys goes back to 2014. We at the Ministry of Energy and Energy Industries do not have the technology to take aerial photographs and that is why we have to outsource that. We however use *Google Earth* which is basically free software. The challenge with that is we do not have control over the dates that the images are taken. So we basically use free available images but limited by the dates that are available. So we have been using *Google Earth* we have been looking at the changes of the topography as well as the extent of quarrying and we have been guided by that for our investigations and for monitoring of valid quarries. So we have been using technology of that nature. The aerial survey that PS mentioned is for us to establish a baseline, as of now, 2023, once it is conducted of all the areas in Trinidad with legal quarrying as well as the areas that can be deemed illegal. So we can then have that baseline to move forward with. That would help us to address many of the questions raised in these documents as to what is the extent of illegal quarrying, the estimated revenue possibly lost. Once we have that data it should be able to assist us with some of them.

Ms. Seepersad: I do not want to belabour the point, but I was here in 2019 when we interviewed the Ministry of Energy and Energy Industries and you told us the same thing. Basically, that you are going to get the drone technology, et cetera, and we are now in 2023 and we still have not had this system, software, whatever in place. Could you tell us why it is taking so long for it to be obtained?

11.00 a.m.

Mrs. Bradshaw-Niles: As I said, the difference between 2019 and now is that we actually have the letter of award, so that that work will begin shortly, very shortly. So, it is being implemented. The other thing as I said that we did, is that we also focused on addressing some areas in terms of the regulations as well. So in 2020, we spent quite a bit of time doing the review of the regulations, and the other aspect that we worked on between 2020 and 2021 was actually the operational side of it, which is looking at the strategies that we could engage with the TTPS. So all of those were areas of focus that we also addressed and also—well, it was during the time of the COVID as well. So all of that was being done during the last three years. But it is being operationalized at this point in time and we are moving forward with it.

I just want to also add, one of the things that we are also looking at, I have just begun

discussions with other agencies, some of our state agencies, is using satellite data. So there is an option that exists and we will start exploring that. So maybe during the course of this year we may be able to use that, not just for minerals but also for the oil and gas side. So that is another area that we are using, looking at technology to address.

Ms. Seepersad: But you do realize it is five years we talking about, four to five years. And therefore, millions of dollars have been lost in revenue that we could have gotten from quarrying activities and if we had moved a little faster to get the technology in place. That is just one of my major concerns, is the leakage of revenue that is due, legally due to the country.

Mrs. Bradshaw-Niles: Yes. The thing about it is that with the illegal quarrying those are not licensed—

Ms. Seepersad: I know.

Mrs. Bradshaw-Niles:—quarries. So really it is to stop the operations of those. So in terms of the focus for the illegal quarrying. The other areas that are licensed or in the process of being renewed those are the ones that we will actually get the revenue from, and so we have been focusing also, you know, in terms of increasing our operations and making sure that, you know, we do due diligence in that area.

Ms. Seepersad: No. I am focusing on illegal.

Mrs. Bradshaw-Niles: Illegal, yeah.

Ms. Seepersad: Because what it is, is you are depriving the country of assets that are being put into a place that they have no control or no access to. And will never be able to have access to it.

Mrs. Bradshaw-Niles: Yes. So in terms of the illegal quarrying as I said, while we may not have had the aerial photography for that period, we have been responding to reports because we do have our mineral staff on the ground as well as we would have members of the public, or other quarry operators which will report to us instances. And once that happens or if we get any indication that there is illegal quarrying in any areas, we would have responded by liaising with the TTPS, or sometimes other agencies would report, you know. And so in terms of the actual addressing the illegal quarrying, that has been our focus during the time.

Ms. Seepersad: Okay. Thank you, Chairman.

Mr. Chairman: Sure. Member Webster-Roy.

Mrs. Webster-Roy: Thank you, Mr. Chairman. Thank you, Madam PS and team for being here today and answering our questions, and providing information to the public at large.

I know research and development, you placed a high priority on that at the Ministry, what I wanted to get a sense of over the last fiscal year, what investment would have been made by your Ministry into research, into technology, or new technology or techniques that would assist in locating illegal quarries and to put an end to illegal quarrying, please, thanks?

Mrs. Bradshaw-Niles: So thank you very much for that question. So we do have—so during the course of even the review of—and I will go back a little further than the one year, because during the review of the minerals regulations we did do extensive research as well, as part of the background for that. So we looked at other jurisdictions and some of the training that the staff would have undergone. They would have also highlighted areas. And I think the satellite technology as I said, is one of the areas that we are looking into. Some of our state agencies are utilizing it for other areas such as methane and so on. And we see that it can be used also, we think there is the possibility so we are exploring that. So over the last year those are the areas that we have been focusing on in terms of technology. I do not know if the Director has any others that he wants to—

Mr. Beharry: Yes, that is correct. Our core focus has been using remote sensing techniques which would be the satellite imagery and many of our staff members who are trained in geomatics engineering are very good in those areas. What that does is it prevents us from exposing our staff to many of the risks involved in dealing with illegal quarrying, for instance, if they are physically on the

ground every day. So by using these remote sensing techniques we are able to identify what is happening, and then we can send this information to the Multi-Agency Task Force for investigation and action. And that is where the police come in because we do not arrest persons, we do not charge persons, we do not prosecute them through the courts. That is the job of the police and that is where the police and the Multi-Agency Task Force comes in.

Mrs. Webster-Roy: But in terms of financial investment at the Ministry, can you give me like a quantum you would have invested this amount in last couple years in terms of research?

Mrs. Bradshaw-Niles: So not more in research but more in terms of training. So yeah, we—I cannot say specifically for the minerals but in terms of the GIS and other technical areas, on average I think the Ministry—as a total because all of our technical staff are involved. I think it would be close to maybe \$1 million we have spent in terms of training overall, and that includes all of the technical areas including the minerals. So we do spend quite a bit in terms of training.

Mr. Chairman: Allow me to just jump in with a follow up with regard to this question. It seems to be—but let me premise that with this. The quarrying industry has been with us for decades, and decades, and decades, and decades. Technology has been with us for decades, and decades, and decades, and decades as well, it concerns me, it worries me greatly that what we heard today so far, and I am hoping there is further clarification, is that you are maybe, and that is the phrase you used, that is a word you used, you are maybe considering the use of the satellite imagery that your other colleagues are doing.

I have been in construction for quite a while as I indicated before, and there are geotechnical surveys that will give you different levels and different stratus and so on, and so on. So that the risks that you are describing, that Mr. Beharry is describing, and they are real risks, they are real security risks for staff going into these areas, but the use of that technology in a small country like Trinidad should be a done deal. It should have existed before. We are now appearing to be taking baby steps forward in a multimillion dollar industry where the State and the tax payers of Trinidad and Tobago are being denied access to substantial amount of funds that is going to fund persons involved in the illegal activity. And I do not get that the Ministry is aggressively pursuing the use of available technology. You may say that you are starting to do this now. You are now engaging a contractor, letter of award going out today. We have been in this industry for decades, illegal quarrying did not start today, it has been here for decades. Ministry has been in charge of quarrying for decades, from time immemorial. And still, it does not seem that we have put sufficient emphasis on dealing with this scourge of illegal quarrying.

The technology is available what is preventing—I am very worried to hear that that my colleague Member Webster-Roy asked about the quantum. And I am hoping that she was trying to—I think that she was trying to give you an option, an opportunity to say that you have spent this much money on research, this much money on development, so that you would have been able to put us at ease and the national community at ease, that illegal quarrying will soon be a thing of the past. And the risk associated with the illegal activity and the criminals associated with illegal quarrying would have been addressed. But you did not say that, \$1 million certainly is not—may be sufficient for training, \$1 million per year I am assuming. But it is not enough certainly, for—one moment please. It is not enough certainly for the purpose of purchasing and utilizing appropriate technology to identify the illegal quarrying and legal quarrying, which we will get to in a few minutes, but to treat with the activity directly, to be able to target those persons involved in illegal activity.

I am very concerned that not enough is being done or not enough aggression is being put in place, especially given that the Auditor General's Department has raised this very said issue since way before 2019. It has been raised on several reports that I have seen so far, and 2019 was just the last one because we treated with that in 2019. Member Browne, I think you wanted to add in?

Dr. Browne: So Chair, this is just a general observation. First of all, to add my voice to the general

expressions of concern on this particular issue. But also to remind the Committee and those appearing before it that there is a standing committee on energy—

Mr. Chairman: Of course.

Dr. Browne:—within the Parliamentary system, and so, our concern really would be following up on the recommendations and findings of the Auditor General. So I know the passion is high, and it is an opportunity to ask some broad questions as to the strategy of the Ministry in treating with this issue. But it is always just to bear in mind as a background the specific mandate of the Committee, and the focus on the Auditor General's recommendations and finding. So Chair, this is not—

Mr. Chairman: If I may—

Dr. Browne: This comment is not to curtail your commentary that you would have just engaged, but just as a general guide and sharing my own perspective as to the scope and breadth—

Mr. Chairman: Thank you.

Dr. Browne:—of our own examination.

Mr. Chairman: Thank you.

Dr. Browne: And I do have some follow up questions—

Mr. Chairman: But allow me to respond to that please. The issue of illegal quarrying is in fact a matter that was raised by the Auditor General's Report. It was in fact a matter that was raised at the Thirtieth Report of the Public Accounts Committee in 2019, and therefore the questions being asked with regard to illegal quarrying fall squarely in line with the mandate of this Public Accounts Committee. I am aware that there is standing committee on other matters, I am absolutely aware of that. But I am dealing specifically—we as a Committee here are within our mandate to question the Ministry with regard to illegal quarrying, and these are the very same individuals who will be present even at that standing committee. So allow me to continue—continue with your questions please.

Dr. Browne: Chair, again, it is not my way of interruption but I do not think we should dismiss the role and mandate of other committees within the Parliamentary system.

Mr. Chairman: No one is dismissing any mandate, Sir. The questions that are being asked today fall squarely within the authority that has been assigned to the Public Accounts Committee. As I am repeating, these very same individuals are the one who will be present at that standing committee. Can we move on please with questions for the individuals present before us?

Dr. Browne: Well, Chair, if we have concluded that aspect I do have a general question in keeping with the mandate of this Committee, and I would wish to direct it to the Permanent Secretary. This is an interesting conversation, because in a sense we are looking back in time at recommendations and reports made by the Auditor General some years ago, and questioning your entities and your divisions with respect to work done and follow up in implementation or lack thereof of those recommendations.

So I have a very general question in terms of the approach of the Ministry of Energy and Energy Industries to the Auditor General's Reports. To what extent do these reports influence the work and direction of the Ministry? I would suspect there is a spectrum of possibilities, one, it goes into a drawer and whenever a committee asks about it we wake up, but hopefully that is not the case. The other end of the spectrum, is it that this forms—these reports form part of a statutory part of your senior management meetings. To what extent do these reports influence the work and direction of the Ministry? And is it something that simply arises when called upon by the Parliament? I would hope not. So I would want a reflection from you on this aspect because it may explain or help us understand some of the delays, et cetera, that we may have experienced? Please.

Mrs. Bradshaw-Niles: Thank you very much for that question. So, the Ministry, you know, reviews and we deliberate on the recommendations that would come out of the Auditor General, and recommendations from the Committees like these. Generally, based on the—once the recommendations are reviewed the—specific recommendations are looked at and maybe pursued based on in conjunction with other internal work that we may be doing, based on our work plan or

based on our strategic plan. So, for example, the things that would not have been accomplished for various reasons over the last three years, we are currently working on our strategic plan right now. And so, therefore, we are incorporating some of these.

When I looked back, for example at the report from the Committee and I am just taking the minerals areas, some of the things that we looked at in that process was the mineral licensing process, the Minerals Advisory Committee, generally in terms of the minerals industry. And based on what the things that we addressed, as I said, we sought to do things not just piecemeal but looked overall at the process, and so the minerals is just one aspect of it.

We have also with respect to the oil and gas area where things were addressed in terms of the production verification, our systems, our staffing. So, when you look at the range of things that we would have done, for example in terms of staffing, we addressed that significantly between 2019 and now in all of the areas, in the Minerals Division, in the downstream—the Petroleum Operations Division in terms of hiring of petroleum inspectors, minerals inspectors, geoscientists, engineers, and all of that. So we try to address things not just, you know, piecemeal but based on our overall strategy.

So they are taken seriously, and we have been implementing in a lot of different areas so that we are able to address it not just—but it is sustainable, sustainable implementation in terms of the areas that are being recommended by the Auditor General, and that is reviewed on a monthly or quarterly basis to ensure we have our Monitoring and Evaluation Department, and they also keep us on track in terms of that, all right. So thank you.

Mr. Chairman: Thank you, Madam PS. Other colleagues, questions?

Ms. John: Chairman, thank you. I do not want to belabour the earlier point but within this Committee because it deals with the accounting there will be overlap from a technical committee into this Committee, you understand? And basically there are gaps, there are gaps. If there is a committee who have been around for long time but there are still these basic baseline gaps and I see no reason that it should not be raised here.

Having said that, I am just looking at the—from the Auditor General’s recommendation that there be implemented a documented process for verification of production data. And I was surprised that the Auditor General who is not a specialist within the Ministry had to say one needed to do something like this. Notwithstanding, I also observed that this production verification, there is a committee now to treat with the reviewing. The question I want to ask is, basically, when you give out these licences and you could correct my language, you give out the licences, is there a process or a measurement some kind of tool of measurement where you tell—or a benchmark where you tell the producer how much he has to produce? And if there is a major gap, you know, there is some kind of consequences, you know, they have to produce I suppose at a certain level. Do you give them a level at which they have to produce?

Mrs. Bradshaw-Niles: It is not as—no, we are not able to do that simply because the production depends on the field, it depends on the geology, and the ability of that field to produce. So when the field is given out we will have bid rounds, we will give out a particular area. We have what we call the exploration phase which is where the company will do technical studies, seismic and drilling. And based on that they will—the results of the seismic and the drilling will help to determine—the data from that will determine the capability of the field. What our engineers and geologists and geophysicists do is that they would one, approve the programmes in terms of the type of work that the company is doing, and they will also on a daily basis monitor the work that is being done, and then they would also review the results, right. So, we will ensure that the conclusions that the company comes to that we agree with it in terms of what is the capability of the fields. I am giving a long explanation just so that you can understand.

So that that varies from field to field whether it is onshore/offshore and the type of field. So we are able to gauge the ability of a particular field to produce based on a number of different things,

and we have engineers and geoscientists which are assigned to specific fields and specific companies, and they monitor so that they are able to understand what the capability of the field is. So it is a continuous relationship between the staff and the operators.

So we are not able to say that we want a company to produce 100 barrels of oil, but we will determine based on the conditions if the company is producing 100 barrels of oil, if they have the capacity to do more, or if that drops below 100, if there is anything we can do to rectify it. And that is a daily process that we go through in terms of the regulation of the industry. So I do not know if that explains it a little better. So it is not a clear cut case that we can say, you know, “company X, you need to produce this” or not.

Ms. John: So there is no real projection as you said, given the existing conditions, it varies? All right. Because I was wandering about your gap analysis, but what I am also seeing is a report that you did almost a year ago, a Thirtieth Report of the Public Accounts Committee, and it says that the product verification first involves receipt of production data from the operator production database. So is it that they have to give you the information and not your—you do not independently kind of—

Mrs. Bradshaw-Niles: Yeah. So the engineers and the geologists, they would monitor the fields. So we will have a general idea of what the capabilities of a particular field are. In that field you will have several wells producing in a case of like on land you may have several thousand wells producing. So the company will send the production data, right, so and they would group it by field, et cetera, and they will send that data to us. We will have a very good idea of the capability, of course, all of this in conjunction with the operator based on the staff that we have monitoring the fields of what the production should be, so we are able to identify if there are issues, there may be issues in terms of facilities itself, or maybe in the reservoir itself which would impact on the production.

So we have two levels, we have at the professional technical level, which looks at the operations of the fields and they would be able to give an idea, get an idea of what the production might be. But then we have at the data level which is all of the data coming together for by field that will come to the data staff, and they will monitor as well to see if they see any changes.

Ms. John: And this is the best practice across the world?

Mrs. Bradshaw-Niles: Yes, it is. Yes, it is.

Ms. John: So if you have to analyze the gap—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Ms. John:—to say okay, this person is producing below expectation because—

Mrs. Bradshaw-Niles: Yes. “Mm-hmm.”

Ms. John:—you still have some kind of expectation, is there a penalty attached to that?

Mrs. Bradshaw-Niles: There is no penalty except if there is a breach of the licence itself.

Ms. John: Breach meaning what?

Mrs. Bradshaw-Niles: Meaning that there may be certain conditions if there is something in the production sharing contract or the licence that is not being done, then there may be a breach in terms of—if they do not fulfil work commitments.

So for example, if you have a requirement that you need to drill a certain amount of wells and you do not. If you do not there may be—there is a breach of the licence. But it is not a matter of if you—or there is a commitment also to send data, and if you do not give that information, that is a breach of the licence.

Ms. John: My last question, Chairman, through you.

Mrs. Bradshaw-Niles: Yeah.

Ms. John: In this verification process, do you have any independence inside of it or it is just the Ministry to the producer? Do you have like an independent assessor who would go in?

Mrs. Bradshaw-Niles: No, no. The Ministry is the one that is responsible in terms of reviewing the data, so there is no—like an independent third party?

Ms. John: “Mm-hmm.”

Mrs. Bradshaw-Niles: No, there is no independent third party for—specifically for the collection of production data, right. We have generally—we use the independent third party will come in terms of looking overall in terms of the reserves, right, which as you know we report on an annual basis. But that is an overall picture because they will look at the reserves and the production and give a status of what remaining reserves that we have.

But in terms of the independent for each molecule of gas, we do not have like an independent person. Where the independence comes in is in terms of the verification of the systems and the facilities that are in place. So what we try to do is to ensure that when the systems meaning the systems of production for your wells, the integrity of your wells, and the production and the facilities are in place, that that is done within international best practice, so that when you actually have production you can be assured that your production is in line with what is expected. And so, at that point in time we will have a certified verification authority, CVA that would look overall at your implementation, at the infrastructure itself.

Ms. John: That is with respect to the reserve?

Mrs. Bradshaw-Niles: Yeah.

Ms. John: Because that too will impact on your ability to attract investors into your programme of what you call it—drilling as it were. Not so? The independence of these—

Mrs. Bradshaw-Niles: So we have several different levels. So from the infrastructure side we have engineers and we use—may have third parties, experts who will come in to ensure our systems are in place. In terms of the actual production and what we do. We also have the petroleum engineers and the geoscientists which verify that the wells that are drilled are the right ones, that you know, the programmes that are done are in line with international best practice. Then we have the systems of collecting the production itself which is just one part of it, which ensures—we try to ensure that we account for the production. Then we have the actual reserves which we take a third party for, which will look at another part of it. So all of these things have to all come together to ensure that, you know, we have to look at all of them in conjunction to make sure we have an entire system that can stand up to scrutiny.

And with that we also have the revenue part of it because production by, of course, your price will give your revenues. So all of those things have to come together. So it is a lot of different moving parts but we believe based on what we have looked at internationally, based on the feedback that we have had based on our history in the industry, we believe that our systems are robust and can withstand scrutiny. And even based on what the Production Verification Committee looked at internationally, our systems are in line with that, because when we got the feedback in 2019 from this Committee, we did a lot of research to ensure that what we are doing is indeed what everyone else is doing internationally.

Ms. John: The Production Verification Committee sounds like something that is a little bit lumbering, is it nimble and really responds within the real time? That is the last one, Chairman, sorry.

Mrs. Bradshaw-Niles: The Production Verification Committee based on some of the concerns that were raised is really a group of our professionals that we put together to take an in depth look at our systems, but not just look at our systems but also look at other jurisdictions.

11.30 a.m.

And they looked about, at five or six jurisdictions, internationally as well, the UK, the US, Norway, very established oil and gas producing countries just as we are, to see if what we are doing really is in line with that, and the results came back that we were. Now, it did also show that there

were some systems internally that we needed to tighten up on and we have sought to address that one of them was in manpower, another you know, was that—it is not that we did not have the systems in place but with upgrading and going into technology, we needed to put the written procedures and that is what the Auditor General flagged.

So, we had these systems but like for the EDH which was implemented very recently, in terms of our history, we needed to have all the documents available so that when the Auditor General comes in, they can see it, but it is not that the systems are not there, it is just that the new systems were not documented. So those were action items that we had to take. So we did all of that and we still have some more that we are looking at, you know, it is a continuous improvement. So, because we want to ensure that, you know, that we account to the people of Trinidad and Tobago, so we want to make sure that, you know, that you can understand as well as we do what is happening. So we are working on that. Thank you.

Mr. Chairman: Before I turn over to member Seepersad, you spoke where you have been speaking about Production Verification Committee. I am aware that they submitted a report in 2020, which was submitted to the Ministry of Energy and Energy Industries, and a series of recommendations were made. Based on information that I have in front of me, however, when an assessment was asked for the status of those recommendations, there were several of those items where there is a blank, there is a space. Some were in progress, some were completed, very few in fact completed, most of these were in progress. The question I have, Ma'am, is given that we have since 2020, this report, the challenge, of course we have is that we have not gotten a feedback as to what has been accomplished and what is the status of those. And in the interest of time, I do not want to identify each one and then ask what is the status of it, but can you give an idea of whether from 2020 to now, the actual level of implementation or achievement of solutions given the queries and the recommendations made by that very same Production Verification Committee? There were several recommendations made that we are aware of, but the problem is that we are not aware what the status of those are.

Mrs. Bradshaw-Niles: Okay, thank you. So, as I alluded to prior, one of the key things would have been staffing. At the time, one of the issues was the staffing in terms of the measurement—the staff dealing with the actual calibration and the measurement of the meters. Since then, we have hired seven members of staff, right, petroleum inspectors in addition to the staff that we currently have to be able to address that. So—

Mr. Chairman: Let me help you to help me.

Mrs. Bradshaw-Niles: Yes, sure.

Mr. Chairman: One of the recommendations was to:

Document the process map currently in place to address discrepancies noted in production data after reconciliation. The procedure should also include means to capture response from operators when Contract Management Division raises queries.

We have no status update of that, can you provide a status of that specific recommendation?

Mrs. Bradshaw-Niles: Okay. So, the actual process was documented.

Mr. Chairman: Done, completed, correct? You have another one:

Consideration of expanding the audit scope to include EMP licences.

Mrs. Bradshaw-Niles: Right, we are still determining how to implement that in terms of the audit of the EMP licences simply because the revenues and so on reside with the Board of Inland Revenue, right. So, that is still under consideration as to how that can be implemented.

Mr. Chairman: So from 2020 to now—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Mr. Chairman:—we have not made any progress with regard to this specific issue, this specific recommendation.

Mrs. Bradshaw-Niles: So the—if you would allow me—

Mr. Chairman: Sure.

Mrs. Bradshaw-Niles:—to explain. In terms of the actual licences itself, our contract management reviews, the licences—

Mr. Chairman: Yes.

Mrs. Bradshaw-Niles:—and in terms of audit they would—so, the production sharing contracts, we have an actual audit group, which was responsible for that within the Ministry of Energy. But they look at cost and the revenue and they—because of the nature of the contracts. The revenues and the—it is difficult with the licences to do the same thing, because of the nature of how the revenues are handled for the licences, which is under the Board of Inland Revenue. So, what I am saying is that it is not that we have not considered seriously—

Mr. Chairman: Ma'am, I am aware of the process—

Mrs. Bradshaw-Niles:—yeah—

Mr. Chairman:—I think the challenge I have—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Mr. Chairman:—is that the Production Verification Committee is also, because it comprises members of your own team—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Mr. Chairman:—who are familiar with this industry. And they would have reviewed all of that and they would have come up with a recommendation, which they viewed as important enough and practical enough based on their research, to undertake this exact issue that we are raising here. So, you have an expert team that would have considered the situation and said, basically, we want to expand the audit scope to include EMP licenses. And therefore it is a practical suggestion made in 2020. There would be a timeline and I expect that there would be a timeline for actually finding the methodology to so do.

I am assuming that the Production Verification Committee, would have in fact, not just made a recommendation that this is what they want to do, but provide some level of technical guideline as to how to so implement. I am just concerned that several years have passed since the actual submission of the recommendations, which would have provided all of this information from before. But several years have passed before we have made the step forward to achieving what I believe to be a very practical and useful goal but time has passed—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Mr. Chairman:—and we are still in a situation today where we are not sure how to proceed with it.

Is it then—remember the mandate of the Committee? The mandate of the Committee is if there is a challenge identified, to find ways or to discuss the opportunities to find—to bridge the gap, to overcome the hurdles. Is there anything that your committee on this side can recommend, or the Auditor General's department can recommend to fast track this process? Or is it that you believe that there is some hurdle that you still need to work out so that you can—this is just one of those recommendations I am treating with. But do you believe that there is a hurdle that you can yourselves as the Ministry, overcome so that we can have the recommendations, it is very worthwhile recommendations, actually implemented in a timely process?

Mrs. Bradshaw-Niles: Yes, so I just want to say that the Committee did make the recommendation, we have considered it but we are in the process of trying to determine how we can effectively implement it. Alright, so—

Mr. Chairman: I accept that, my concern really was that it has taken three years to get to this point where we are still considering how to move forward into the recommendation that was made by your own team.

I want to move on to a couple others, but there are several such recommendations and we want to get the status of those. So, Madam Permanent Secretary, if you can provide us with the

recommendations and the current status, we will take that in writing given the—in interest of time, but if you could provide us with the recommendations and the status as at today of those recommendations, then we may be able to be in a more informed position to move forward. Is that okay, Ma'am?

Mrs. Bradshaw-Niles: Yes, that is fine.

Mr. Chairman: As before, can I tie you down to a time frame? Because this is current information within your hands, it is just a status update.

Mrs. Bradshaw-Niles: We can provide that by Friday.

Mr. Chairman: By Friday?

Mrs. Bradshaw-Niles: Yes.

Mr. Chairman: Wonderful. Today is Thursday?

Mrs. Bradshaw-Niles: “Mm-mm.”

Mr. Chairman: Today is Wednesday? Correct.

Mrs. Bradshaw-Niles: [*Laughter*]

Mr. Chairman: This Friday, that is wonderful. I look forward, Mr. Beharry, please take note.

Mrs. Bradshaw-Niles: Not the—the recommendations for the production verification, eh, the other—

Mr. Chairman: Of course. No, I am just—

Mrs. Bradshaw-Niles:—information is in the hands of the TTIPS. [*Laughter*]

Mr. Chairman: I am just hoping that Mr. Beharry could take similar pattern—[*Inaudible*] All right, thank you very much. Member Seepersad, I know that you have been waiting to ask your questions.

Ms. Seepersad: Thank you, Chairman. Madam Permanent Secretary, I am interested in the energy data hub system. Can you tell me who manages it and have there been any challenges, hindrances in implementing the system or operating the system?

Mrs. Bradshaw-Niles: So the Manager of Energy Data Operations is here with me, so I will invite her to answer that question.

Ms. De Gale: Hi, good morning. So, the energy data hub is the responsibility of the Energy Information Management and Technology Division. And the only challenge we had in recent time was staffing but we are currently in the process of populating the database. It is in use, it is in live use, most of the operators are currently on stream, the ones that are not we are in process of training to get them on stream and in terms of ones who have challenges, we are working with the operators to get them to submit their data through the energy data hub and so, we can move away from the hardcopy submissions into the online database.

Ms. Seepersad: When do you think you are going to have the system fully up and running?

Ms. De Gale: Well, the population I mean, we have been in this industry for quite a long time. So the population of the databases happening is going to be an ongoing process so, from current to now, we will probably be able to give you some information. We have data all the way back to probably 2007, which is most current and we are populating back in reverse chronological order. But we are looking at maybe a timeline of about three years to fully populate the database from 1857 to present and—but in terms of usage, we are using it currently.

Ms. Seepersad: And you mentioned staffing so, you are going to be fully—your staff complement is going to be fully up and running in what period of time?

Ms. De Gale: Oh, we have already started to address that. So we already hired some staffing and I think PS is working on trying to get the full team back on stream but we are in the process of doing that. So, the project is still ongoing.

Ms. Seepersad: Still on going?

Ms. De Gale: Yes.

Ms. Seepersad: Chairman, permit me one last question. Madam Permanent Secretary, staffing was also—staffing generally was identified as an issue. How are you addressing that, the gaps in your staffing?

Mrs. Bradshaw-Niles: Thank you very much. So, were able to make significant progress in terms of that, so that was one of the areas. So, in all of the different areas which would have been in energy data and minerals and with the petroleum inspectors and with the technical staff, so we had some permanent positions which we were awaiting to fill. We did get some of them filled, we are in the process of interviewing for others, that is for the establishment but what were able to do within the three-year time frame was to get contract positions against those. So, in the interim, were able to fill to get contract positions until the establishment positions were filled. And so, that has been successful so we have taken on engineers, geoscientists, petroleum, as I mentioned, both sets of inspectors and so, were able to do quite a lot in terms of the staffing over the last three years.

Ms. Seepersad: What percentage do you think is still unfilled?

Mrs. Bradshaw-Niles: In terms of the establishment?

Ms. Seepersad: Well, in terms of your overall requirements, whether it is an establishment or contract position?

Mrs. Bradshaw-Niles: I will have to get the numbers, the specific numbers, but I would say maybe— if we—in terms of the establishment, I would say maybe 15 per cent, 15—20 per cent. But saying so, some of those roles are the key roles, right, so we have the positions that are unique to the Ministry of Energy, which I—like your petroleum engineers, chemical engineers, and so on. So even though they may be small in numbers, you know, they—

Ms. Seepersad: They matter.

Mrs. Bradshaw-Niles:—yeah, they matter but we are in the process of doing so. But as I said, we have the contract positions which we have been very successful in terms of having those while—filled so that we can have the work being done while the process is undergoing.

Ms. Seepersad: “Mm-hmm.” Thank you, Chairman.

Mr. Chairman: Just to jump off on that question. Given that you have just indicated that there is a bit of a gap between the levels of the employment in specific areas that you would want, and what currently exists, you said maybe about 15 per cent, I know it is a ball—

Mrs. Bradshaw-Niles: “Mm-hmm, mm-hmm.”

Mr. Chairman:—it is a ballpark, but has that affected your ability, because you indicated that some of it are critical individuals—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Mr. Chairman:—critical for the operations of the industry. Has that adversely affected the operations and your ability to operate effectively and efficiently?

Mrs. Bradshaw-Niles: So we—I would say, to some extent but I would also say that the—let me just qualify that. We also have, we implemented a process programme which we call the mentees, where we had—it is 2019, as well, we had a group of about 40 young persons, most of them with either first class honors, or distinctions with masters that we have had in the process in the Ministry as well. We have returning scholars, we have OJTs and so, what we have, and that is why we have a lot of training as well, because we also have a lot of young, bright staff within the Ministry of Energy, along with some of the seasoned professionals that we have. So what I can say is that I am really, I mean, our staff gives all, they go beyond the call, and even I can attest, like even during the COVID as well, we went into work-from-home practically seamlessly, you know, because of the use of technology and you know, we bought laptops very quickly and so on. And so, while I can say the staffing has been an issue, we use all of the available resources, and I have quite a lot of my staff that go beyond the call to ensure that we get things done, alright. So, we utilize, you know, all of the manpower that we have to try to achieve what we have to do.

Mr. Chairman: Thank you very much, Madam PS, and commendations to your staff, I hope that you would increase your staffing as required so that you could give them a bit of a—well, I know that they would have been forced to perform above and beyond because of the short-staffing so, hopefully that the increased staffing that you project will treat with some of those issues.

Mrs. Bradshaw-Niles: Yes, we are working very hard on that, thank you.

Mr. Chairman: Thank you. May I turnover now to member Browne? Monroe, sorry, member Monroe, sorry.

Mr. Monroe: Thank you very much, Chairman. To the Permanent Secretary, could you tell this Committee based on the recommendations made by the Production Verification Committee, that the division be assigned to audit the exploration and production licences of the operators—has this recommendation been fulfilled?

Mrs. Bradshaw-Niles: No, that is I think it is the same recommendation the—with respect to the audits of the EMP licences?

Mr. Monroe: Yeah.

Mrs. Bradshaw-Niles: No, this has not been fulfilled. I think.

Mr. Monroe: Do you have a timeline as to how soon this may come into play?

Mrs. Bradshaw-Niles: We will try to get it done within the next year, yeah. But it is not fulfilled.

Mr. Monroe: Okay, thank you.

Mr. Chairman: Member Browne.

Dr. Browne: Thank you. PS and team, one of the areas examined by the Auditor General and reported by the Auditor General was the issue of a manpower audit to determine and fortify personnel competencies within the Ministry, given the great importance of your mandate, keeping our lights on and everything else around us. And in your written response to those recommendations, there was some emphasis placed on training of senior management, I just have a few questions as a follow up to those submissions.

There was a focus on a particular type of, you know, it is highly technical, but training to enable senior management to regulate automated gauging and metering of oil stockpiles and that type of training. I am interested in a bit more detail on this. How does the Ministry go about procuring such training? What is the process that you use? Who are the—for this training that you have referred to here, who are the service providers of this training and what is the frequency of this type of training for your senior management? I hope you are able to respond.

Mrs. Bradshaw-Niles: Thank you very much. So, what we would normally do is that based on notices that we would get, or if there is a particular training like for example, in a specialized area, such as you highlighted, we would—once if it is locally—so for example, in 2023, there is some measurement training that will be held in Hilton very often, periodically, it will come, different types of training will come to Trinidad, and therefore we will send our staff, a group, the—whichever group is identified. If that training has not, does not come to Trinidad, or is not available virtually, then we actually contact the provider, and we normally get training setup within the Ministry, right?

So, they may come specifically for the Ministry of Energy, and we will get whatever is the minimum group, if it is 10 persons, 15 persons, depending on the type of training, sometimes we invite other agencies, you know, so the state agencies as well to participate so we can actually request training as well. So I will give Mr. Rudder the floor, so he can specifically address the measurement. But for example, during the COVID period, in 2020, we had one of the better known providers do a series of maybe about six courses for our young professionals, which took them through the entire industry, from petroleum, economics, some of the implementation of the more technical areas, geosciences, and so on. So, we had it specialized and some of it leadership, strategic leadership and so we did that, you know, and continue to do it so that we can have from all levels of staff and so it is one of the

things we focus on. With respect to the measurements and the custody transfer, I will ask Mr. Rudder to speak specifically on what we have done.

Mr. Rudder: Yes, good morning. In terms of the training, you were mentioning, that training was provided by an international organization—you want the name of the organization? It is called PetroKnowledge. So they were providing the training online and we—I cannot remember the number of persons from the Ministry. I attended the training, I think it was about three or four persons attended that training—I think that was the first time we did attend that training—was done in 2021, I believe. Why we were interested in that particular training is because one of the operators in Trinidad and Tobago was interested in using automated gauging instead of manual gauging to report production to the Ministry. So, we wanted to find out more about it through that training programme. That training programme is also conducted—I think it is [Inaudible] this year. How we train up officers, we would normally rotate our officers either on a six-month basis or a yearly basis so, we may rotate different persons, different inspectors into measurement so they will—some of the inspectors may not have been trained in that area so, when that training comes back again, we will be able to train them—those who did not go to the training—in that training programme, all right? But as PS mentioned, there is another training programme planned for this year, it is going to be in country, in Trinidad so, we normally use those kinds of opportunities if a training is held in Trinidad like we had in person to send persons to those training programmes.

Dr. Browne: Follow up, again, in your written—thank you for the response. In your written response there was also reference to training or familiarization with digitization methods and you know, that is one of our key priority phrases in the country and region, digitization. So, I just wanted to take the opportunity to ask your team, what is the extent, the degree of modernization? I know it is a broad question but maybe for—without going into full detail, to be able to give me a sense as to—because we are very proud of our long heritage in this industry, but that would come with a certain mode of operation and I am sure, I am convinced that the Ministry would have been taking a number of measures to modernize and digitize its operations, its procedures, how far has that gotten? Are you able to give me a comment or some feedback on the degree of digitization of the Ministry of Energy and Energy Industries?

Mrs. Bradshaw-Niles: Thank you very much for that question. So, in terms of our—based on the nature of the work itself, the technical work, to a large extent, we already saw our professional staff already work in a digitized manner using very advanced software, right, for their specific areas and that goes from our GIS, geographic information systems, to seismic technology, to, you know, the petroleum engineering so, in those areas we have done quite a lot. With respect to the data itself, which is now recording in terms of the submission, the EDH, the energy data hub, and we have done also the minerals data hub that is already in place. The challenge we have with the digitization is really—which is what Ms. De Gale was speaking about is putting in the information which predated the establishment of these systems. So, and that is her staff, a lot of her staff is actually doing that work in terms of putting it in. We are constantly looking at ways in which we can integrate other parts of the system, right? So, because we are public service and also with the petroleum industry, I know for example, like with respect to our revenue collection, the Ministry of Finance is currently doing a lot of work in terms of, for example, making available the system so that revenue and cheques, you know, can be disbursed and so on. So, what we need now and which is what we are working on is how we can get the other parts of the systems integrated for our stakeholders, right? So, in terms of payments, you know, being received and so on, we can make other avenues available so, which is the general public service is also working on that, so we are part of that process as well.

So, in terms of digitization, the Ministry of Energy is in a very good place, our staff, a lot of what they work, they work from the cloud, they are able to work at home or in the office, you know, and more seamlessly transmit large amounts of data between the shareholders, the stakeholders in the

industry and ourselves so that you know, we can interface with the stakeholders very efficiently. So, I would say we are in a very good place in terms of the digitization, from the industry standpoint. There is always a lot of improvement because technology, as you know, works, improves quickly. But the aspect which we are also working with the wider public services in terms, of course, our registry, and you know, the admin and so on, which is where we have to make a big thrust over the next few years. Thank you.

Mr. Chairman: Thank you, Madam PS. I want to turn now to member John.

Ms. John: Thank you, Chairman, thank you, PS. Just wanted to go back a little bit to the discussion we had earlier because we are wrapping up shortly. And I want to say, well, one has to accept what you have said, with respect to the oversight of the production assets, as it were, in terms of the variables and that makes it not to—it is not as specific in terms of what you could project and basically put down on, I do not know, whatever the spreadsheet in terms of this is the returns we get on this asset, as it were, because it is said, there are a number of other prevailing factors. Notwithstanding that, I suppose there is an engage methodology to verify the production and I have a question here where in verifying the production—how does the Ministry ensure that gas losses are within the agreed limits? Because that is what I was trying to ask if there is a plus or minus, you have some kind of—what you call it—up or down number that you say this is acceptable or unacceptable, which is, in statistics we say is a deviation from the mean, whatever that means.

Dr. Browne: Standard deviation

Ms. John: Standard deviation, you see, you have to go back into finance long, long time ago, right, and that is—whether it is properly dealt with, as maybe stipulated or if it is stipulated within the sale contract, if you have that deviation within the sale contract at all? What are the factors and it is internationally benchmarked? So, we know we are on the right track—

Mrs. Bradshaw-Niles: “Mm-hmm.”

Ms. John:—because everything basically we are in a kind of global industry. You are really in a good industry from that point of view, that it does not allow you to go too far away from what is, I think excellence, and you do not have to sell me on the hard work that public servants put in. I am an advocate for that. I know public servants work hard.

12.00 noon

Mrs. Bradshaw-Niles: Yes. So, thank you again. So, within the losses within the system, there are acceptable ranges of—so, okay, if you are looking at the data itself, in terms of monitoring of the production, if there is any variation at all from the data submission—

Ms. John: And that is up and down variation?

Mrs. Bradshaw-Niles: Up and down variation—there is usually a note which will indicate a reason for it. If it exceeds and so, for example, if you have a field that is producing regularly, because with natural gas, in particular—so, let us use natural gas—it is a buying and selling. So, it is not stored anywhere, so there must be a demand for there to be a supply. Right? Sometimes the supply is limited, based on what is happening with the facilities. But, in our system, for example, with natural gas, for most of the natural gas, the National Gas Company is the aggregator. So, they would also be in the system in terms of the purchasing and selling. So, that is another layer in which we have a state entity being in there, because they would also be monitoring in terms of what they are receiving and what they are selling. From the Ministry of Energy and Energy Industries stand point, when we get the data, if there is a significant variation, either the data team will pick that up and they would liaise with the engineers.

Ms. John: Pick it up quickly? Is it real time or there is a lag in that system?

Mrs. Bradshaw-Niles: Within a day or two. But in terms of the real time, the engineers that are within a field that are monitoring a company, would be aware of what is happenings, because we are in contact with the operators. Right? And also, like maybe the NGC. So, if there is any change in

the system in a big way—if something goes down or whatever—we will be aware of it. Right? That information will come to us. So, there are several different levels at which we will monitor what is happening in terms of production.

In terms of acceptable losses with re: contracts now, those things are written within the contracts and your system, in terms of the infrastructure, will have losses in it based on how the system is designed.

Ms. John: Is that losses redundancy or losses based on inefficiency?

Mrs. Bradshaw-Niles: I will turn over to Mark to see if he can.

Mr. Rudder: Sometimes, like for instances with natural gas, if natural gas is produced offshore and it is coming onshore, you may have gas dropping out, condensate dropping out of the gas, what we call condensate dropout. So, it is converted from a gas to a liquid. Right? So, it is something that—losses along those lines in terms of what you measure offshore and what you get onshore, there may be a difference.

Ms. John: We call that shrinkage.

Mr. Rudder: Right.

Ms. John: Okay.

Mrs. Bradshaw-Niles: So, all of this is to say that on a technical level, it is monitored by multiple different—the parties who are buying and selling, but also your contract will also have written into it what is acceptable in terms of that. So, usually in the system, there are multiple places at which you can verify production and to determine if there are losses. Right? So we have the downstream petroleum. We have a section which is called Natural Gas Supply and Transmission, and they look at the projections, the demand, what is happening on a day-to-day basis and the pipelines. Then we also have in contract management, we will have the engineers who are monitoring the fields on a day-to-day basis. So they will be touch with the company and they will know if there is something major, they can report on that.

And then we have the data people who get the figures. So, if they pick up anything there, they would come back to us, and then we have the facilities guys who will be going out with the verification with the calibration. They would be on if there is—so there are multiple areas that we can pick up if there is something off. So, I hope that helps. So there is—what you call the redundancy, it would not be the same data, but we will tend to pick up areas. If you miss it in one, you should be able to get it somewhere else to know that something is not right.

Ms. John: Okay. So, the system kind of regulates itself in a way?

Mrs. Bradshaw-Niles: Well, it regulates—all of this is regulation. All of this is within the Ministry. And then, as I said, we have with natural gas, we have NGC in there as well. So, you know, it is a whole moving system that tends to—so it does not regulate itself, but we regulate it in multiple different ways and in different areas.

Ms. John: So, I just want to add, given this, has there ever been losses? I have a question here. Have gas losses ever proven to be a major source of revenue leakage? I guess that question is redundant, because if you have gas losses, we will have revenue leakage. But gas losses will come about because of what? Faulty equipment or faulty reporting for overestimation?

Mrs. Bradshaw-Niles: There are a number of different—so what I am saying, the system is built in such a way, so it is very technical as well. So, the producers, on one hand, they are producing and they would be measuring what they are producing, and then you have the transmission which is along the pipelines. Right? Most of the pipelines is NGC. So, they would be monitoring what is happening. Then you have those who are purchasing on the other end. The plants who are purchasing, will ensure that they are getting what they are being paid for. So, if there are losses along the way, it depends on the type of contract, it will determine how that is accounted for. So, all of it will not necessarily come back to Government, because some of it, the buyers and the sellers, will deal with that—if they make

it up later on. Even if you do not get it, you still have to pay for it. Right? So, it depends on the source of it.

So the system, you know, it is written in terms of the equations. There may be boil off. So, there are a number of different ways. So, that is why we need the technical staff there who understand what is happening in the system to be able to get in there and we do have the staff that is there. And, as I said, with natural gas, which is where a lot of our revenue comes as well, we have the engineers, we have NGC there and we have, you know. Onshore, we have Heritage is there, you know, with the lease up and so on. So, there are a number of different areas that we work with in terms of ensuring that, you know, where the losses are, we can identify them and then, you know, who is supposed to pay for it would pay for it and so on.

Ms. John: Thank you, PS.

Mr. Chairman: Members, do you have any more questions? I just have a couple more just before we wrap. I have a question from a member of the audience who messaged me directly. Having trained staff, having spent all this money training staff—and this ties in to something I read somewhere in one of the documents before—that you have staff on one-year contract and you are now trying to migrate staff to three-year contracts. But, having trained staff, what mechanism—and this is a highly competitive and highly technical area and a substantial amount of money is being spent to train staff. How do you ensure that the staff that you spent a substantial amount of money training are kept within your arms, so that you do not have to continuously train new staff and lose them to somebody else?

Mrs. Bradshaw-Niles: Thank you very much. So that is, of course, an area which, since I joined the Ministry 25 years ago, you know, that is—because within the industry, not just the Ministry, there is a trend where people move, and it is just part of the way. So, what we try to do, of course, within the Ministry of Energy and Energy Industries is to, of course, make sure we have work itself that is engaging, and we try to create an environment that would make it conducive for the professional development, you know, in terms of the employees there. So, some of us stayed. Like I have stayed, Mark would have stayed and Candice. So, there is a group of us. You know, there are people who as well want to serve the country and, you know, would stay in the Ministry, and we have quite a large group of that.

So, we try to ensure that we have an environment and training and challenging work that will keep persons. But, we try to also ensure that we get better benefits to see how competitive we can be within the limits of the public service that could avoid us losing staff. But we do lose staff. I lost a member of staff last year and I told him, I said, if it was my own company, you know, I would increase your salary so I can keep you. But, you know, of course, we have limitations. But we do our best within the remit that we have, within whatever authority we have and flexibility, to ensure that our staff remains. But we have very good staff and so, therefore, you know, the opportunities will come from other companies, other areas for them to go. So, yeah.

Mr. Chairman: Thank you very much, Madam Permanent Secretary. I want to give both the Ministry of Energy and Energy Industries a one-minute wrap up as we are wrapping up now, but your parting words, please, Ma'am.

Mrs. Bradshaw-Niles: Yes. So, thank you very much, again. I just want to apologize for not responding to the company, but it is not for lack of wanting to but, certainly, because there is just so much that we need to get done on a daily basis, and I just want to assure you that, you know, we are working really to ensure that both for the revenues and, you know, in terms of ensuring that the benefits of the industry, not for now, but for the future as well, redound to the people of Trinidad and Tobago. We will continue to do our very best and we will also ensure that we improve in terms of timeliness and response to this Committee. Thank you very much.

Mr. Chairman: Thank you very much, Madam Permanent Secretary and members from the Ministry

of Energy and Energy Industries. I want to use the opportunity as well to give the representatives of the Auditor General's Department, since we did not give them much work today, I want to give them the opportunity to leave us with some parting words, suggestions and queries that you may also want to extend to the Ministry.

Mr. Sinanan: Thank you, Mr. Chairman. The Auditor General's Department notes the points raised in this meeting, especially the award of the drone contract, the minerals regularization regulations revision, the human resource issues addressed, the calculation of the volumes of oil produced, especially the work of the Production Verification Committee, the overview of field management, licences and the digitization, which will form part of the work programme for this year.

The audit of the 2021/2022 appropriation account has been done. It is being reviewed right now, and the Auditor General's Department is working to assess the overall integrity of the revenue streams of the energy and mineral industries of our nation and the general operations of these industries, bearing in mind the tolerance levels within these industries with respect to calculations and calibration. Thank you, Mr. Chairman.

Mr. Chairman: Thank you very much. So that is it. It falls to me, on behalf of the members of the Committee, to thank you all very much for your participation here; both the Ministry of Energy and Energy Industries and the Auditor General's Department. It has been, in fact, a very informative discussion, and I hope that we will keep to our commitments that information will come a little bit easier, given the critical role that the Ministry of Energy and Energy Industries plays to the country as a whole and to our gross domestic product generally.

I also want to use this opportunity to thank members of the viewing audience for participating, for getting involved in our process here, so that we could also share information with you and for the questions that would have come from the viewing audience. Thank you all very much for your presence and for tuning in, members of the viewing audience.

I would now like to have the officials excused, and we will go back to the in-camera session. Thank you very much.

12.15 p.m.: *Meeting adjourned.*