PERFORMANCE AUDIT

OF

MONTSERRAT ULTILITIES LIMITED

Efficiency, Effectiveness, Financial Stability, & the Transition to Renewable Energy

Office of the Auditor General
January 2025

MONTSERRAT UTILITIES LIMITED

This is a Report of a Performance Audit conducted by the Office of the Auditor General pursuant to Section 103 of the Montserrat Constitution Order 2010.

Marsha V. E. Meade
Auditor-General (Ag)
Office of the Auditor General
January, 2025


OFFICE OF THE AUDITOR GENERAL
MONTSERRAT

PREAMBLE

Vision Statement

To be a proactive Supreme Audit Institution that helps the nation to make good use of its resources.

Mission Statement

The O.A.G. is the national authority on public-sector auditing issues and is focused on assessing performance and promoting accountability, transparency and improved stewardship in managing public resources by conducting independent and objective reviews of the accounts and operations of central government and statutory agencies; providing advice; and submitting timely Reports to Accounting Officers and the Legislative Assembly.

The Goal

To promote staff development, enhance productivity, and maintain a high standard of auditing and accounting in the public sector, thereby contributing to the general efficiency and effectiveness of public finance management.

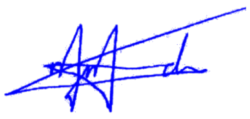
AUDITOR GENERAL'S OVERVIEW

This study examined the governance, efficiency, effectiveness, financial stability, and the transition to renewable energy, at the Montserrat Utilities Limited (hereinafter, M.U.L.). Overall, the evidence gathered reveals that there are satisfactory aspects of governance and structure. M.U.L. is a statutory corporation owned by the Government of Montserrat (GOM) and governed by the Montserrat Utility Ltd Act of 2013 and underpinned by other laws and regulation as well as regional and international standards.

In terms of effectiveness, efficiency, and accountability, we found a number of areas requiring immediate improvement: e.g., (1) M.U.L. has been operating at a net loss since year 2016, (2) the rates of revenue for electricity and for water have not been adjusted since year 2001 and year 2004 respectively ; (3) major operational vehicles and other assets are aged and need replacement; (4) a loss of over 150,000 gallons of water every day from deteriorating catchment areas; and (5) inadequate collection of revenues and arrears.

The Government of Montserrat's Sustainable Development Plan (SDP) 2008 to 2020 identified economic management as its number one strategic goal. The GOM's Policy Agenda 2021/2024 and the MOFEM's Strategic Plans 2020/2021 and 2022/2023 identified the following areas as pillars for rebuilding and for growing Montserrat's economy: (i) Develop strategies for addressing obstacles to doing business and implement sequenced plans for the removal and mitigation of these obstacles; (ii) Sectoral resources unlocked for business development, investment promotion, and trade-facilitation aimed at stimulating economic growth; and (iii) An environment that fosters prudent economic management, sustained growth, a diversified economy and the generation of employment opportunities. The Montserrat Energy Policy aims to achieve 100% energy from renewables by 2030. These strategic priorities and national outcomes are directly related to M.U.L.

Thanks to the management and staff of the M.U.L. for the cooperation and assistance, other participating Ministries and Departments, and all other persons who provided information, clarifications or extended any courtesy to the audit team throughout the period of the audit.



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GLOSSARY OF ABBREVIATIONS

CARICOM	Caribbean Community
FCDO	Foreign, Commonwealth & Development Office (U.K. Government)
F.S.	Financial Secretary (MOFEM)
GDP	Gross Domestic Product
GOM	Government of Montserrat
HRMU	Human Resources Management Unit (GOM)
INTOSAI	International Organisation of Supreme Audit Institutions
ISSAI	International Standards for Supreme Audit Institutions
MCWLE	Ministry of Communications, Works, Labour & Energy
MOFEM	Ministry of Finance & Economic Management (GOM)
MPS	Montserrat Public Service
M.U.L.	Montserrat Utilities Limited
OAG	Office of the Auditor General (GOM)
OECD	The Organization for Economic Cooperation and Development
P.S.	Permanent Secretary (MCWLE)
SDP	Sustainable Development Plan (2008 to 2020) (GOM)
S.D.G.(s)	Sustainable Development Goal(s) (2015 to 2030) (United Nations)

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EXECUTIVE SUMMARY

Overview

Montserrat Utilities Limited is a State-owned company. M.U.L. is governed by the Montserrat Utility Ltd. Act of 2013 and underpinned by other laws and regulations, and subject to regional and international standards, which include the International Financial Reporting Standards. M.U.L. is primarily responsible for providing electricity, piped water, and sewage-system maintenance on Montserrat. Key operational oversight and funding for M.U.L. are provided by M.U.L.'s Board of Directors and the Ministry of Finance and Economic Management (MOFEM) respectively.

Main Findings

1. Overall, M.U.L. has a good governance framework in place. Montserrat Utilities Limited is a statutory corporation and 100% Government-owned enterprise. The Board of Directors provides oversight to M.U.L.'s operations. There are clear lines of reporting and accountability as the Financial Controller and other managers report to the Managing Director, who reports to, and is held accountable by, the Board of Directors. M.U.L.'s roles and functions are enshrined in the Montserrat Utilities Act and supported by other laws and policies. Independent financial audits provide further transparency and assurance about M.U.L.'s financial management and accounting.

2. Water-rates and electricity-prices remain unchanged for up to 30 years, while costs to M.U.L. soared. The domestic electricity revenue-rates have not changed since February 01, 2001, the water revenue-rates have not changed since January 01, 2004, and the commercial revenue-rates are the same since year 1994. The rates of revenue are key drivers to the financial performance and sustainability for all utility-companies. The outdated prices to M.U.L.'s customers have not kept pace with the rising costs from M.U.L.'s suppliers. Over the years, the wholesale prices of oil and of gas have been fluctuating frequently, and this has a direct effect on the Company's cost of producing energy and pumping water. However, the ultimate decision-making power over M.U.L.'s prices to customers has resided with the Cabinet/Government of Montserrat. Other countries, including British Territories, regularly raise their rates to cover costs.

3. M.U.L. has been consistently operating at a net loss for the last 8 years. In recent years, the Company's administrative and other operating costs continues to exceed the Divisions' gross profits, leading to net losses since year 2016. Delays by suppliers, longer

shipping/delivery times, and rising costs of imported fuels, vehicles, equipment, generators, spare parts, and other items, together affect every part of the Company's operations and finances. Commendably, the long-serving technical officers have helped to sustain the frontline operations despite severe financial constraints and supply-chain challenges. Additionally, another positive finding of our audit is that the revenues earned by the Water Division and by the Electricity Division continue to exceed their production costs. Therefore, the two Divisions are managing their direct expenses well within their direct revenues.

4. A drastic loss of over 38,950,000 gallons in water-supply at Killikrankie Springs during years 2020 to 2023. Since year 2020, the net output from every spring-source of M.U.L.'s water has declined rapidly. For example, Killikrankie Springs, the long-time major source of water-supply catchment area, urgently needs repairs. In December of 2020, the Killikrankie Spring recorded a catchment of about 150,000 gallons of water per day. In year 2023, this spring recorded a catchment of only 50,000 gallons of water per day (i.e., nearly a 70% loss!).

5. Damaged and aging water-networks & power-infrastructure. Most of the distribution-network is old and many sections of the network are leaking or damaged. There are large annual losses of water at various points of the network, in addition to the losses at the spring-sources. The above-ground power-network faces multiple risks (e.g., extreme weather-events; environmental hazards), and the water-network is at risk from the climate-crisis, from human activities, and from the activities of various species of animals (especially around the water-sources).

Key Recommendations

6. Gradually adjust M.U.L.'s rates of revenue. To return M.U.L. to its long history of profitability, the Board should advocate through the Financial Secretary/Minister/Cabinet for an urgent updating of rates per unit charged to customers for water and for electricity services. This is the most important step in achieving M.U.L.'s viability and sustainability. As with the Montserrat Social Security Fund, this can be done in phases to smoothen any impact on households and businesses. Furthermore, as noted in our previous Performance Audit of M.U.L. (2017), in periods that fuel-prices decline, some of the savings can be converted to rate-increases for M.U.L., while sharing the remaining savings with customers. This is essential as only rate-increases will improve M.U.L.'s overall revenues, cashflows, and profitability. Otherwise, fluctuations in fuel-prices are merely a pass-through cost-recovery (called Fuel Surcharge), and not a revenue to M.U.L. itself.

7. Strengthen M.U.L.'s efficiency and revenue/collection capacity. M.U.L. should advocate through the Financial Secretary and the Minister of Finance for the soonest equipping of M.U.L. with a Compliance/Collections Unit and a Legal Unit. Given the tens of millions of dollars of annual revenues at stake, and the estimated large losses of revenues both from delinquency and from uncollected amounts, consistent and effective enforcement requires dedicated professionals in these functional areas. This will help to minimise new arrears of monies owed, while reducing the large backlog of uncollected balances assessed in previous years. The experience of other jurisdictions proves that these investments quickly repay themselves and become more than self-funding. Having more qualified, experienced, and dedicated officers for each of these major functions will allow the existing staff to refocus on their core areas of responsibility and competence.

8. Urgently reduce or eliminate the deficit. M.U.L. should design and implement a plan of action with clear milestones to reduce or eliminate the budget deficit much faster. This should also be reported to the public to support and promote accountability and transparency. The focus should shift from stopgap measures to choosing methods and technologies that will be sustainable and suitable for the Water and Electricity Divisions in order to serve the Montserrat Community with a high quality of service consistently. This requires the full staffing of M.U.L. and, in particular, the restoration of adequate resourcing of the Generation Unit, including accredited training and professional development for all staff. It also requires the MOFEM to seek the Cabinet's approval and the FCDO's full support to do appropriate budgeting for operational expenses each year, correcting the repeated shortfalls in funds allocated versus the known levels of administrative cost and expenses. A combination of measures will reduce expenses and strategically increase income.

9. Repair, protect, and maintain the springs & catchment areas. In addition to testing each water-catchment to assure that the water in the systems are safe, there needs to be a monitoring program with regular and periodic maintenance to the catchment areas. This includes cleaning of each system's roof, tank, gutters, and filter. Maintaining access to each catchment area is important for achieving this objective. Improve the collecting, storing, and re-using/recycling of water. The appropriate professionals, tools, vehicles, and equipment must be made readily available for the relevant Unit of the Water Division to execute its duties effectively and efficiently.

10. Repair and climate-proof water- & power- infrastructure. With the support of GOM/FCDO, the Company must develop a comprehensive strategy to repair infrastructure, to keep it well maintained thereafter, and to replace old/malfunctioning assets in a timely fashion. In the interest of national security, economic resilience, and public health, the key stakeholders should work together to accelerate past plans and efforts to place more of the distribution-network (for

electricity services) underground. These efforts will help to reduce risks and threats related to the climate-crisis, hurricanes, environmental hazards, human activities, and animals' activities. Also required is systematic setting aside of funds each year to provide reserves for timely replacement of old assets and periodic upgrading of infrastructure to reduce long-term risks and operating costs.

Audit Conclusion

11. Overall, M.U.L. has a clear legislative framework and governance structure in place for its operations. However, in practice, we have noted several inefficiencies in operations, frequent turnover of employees, some prolonged vacancies, insufficient training of the junior employees, delays in repairs/replacement of old/malfunctioning assets, and a large backlog of infrastructural maintenance. Repeated crises with electricity-services reflect this. There are large and recurring financial gaps between [a] actual and budgeted revenues and expenses, [b] the actual revenues collected, and [c] the revenues required to cover the total costs of operations each year. Both actual and potential revenues have declined with the large loss of customers since the volcanic crisis of the late 1990s led to an exodus of roughly two thirds of the population. Meanwhile, cumulatively, millions of dollars of revenues have not been collected timely or at all, owing to factors such as net emigration, loss of properties in the Exclusion Zone, non-payments by some customers, and late payments by other customers.

12. In theory, M.U.L. is an independent, self-managed corporation. In practice, the Cabinet/GOM makes most of the key decisions affecting energy-policies, utilities, taxation, and prices for water and for electricity, including determining the types of services that M.U.L. provides, and sets the rates of fees that the Company administers. Thus, M.U.L. is unable to make certain decisions for itself that would allow the Company to achieve its full mandate while ensuring long-term profitability. It is long overdue that the Cabinet/Legislative Assembly approve adjustments to M.U.L.'s revenue-rates in line with the actual total operating costs to deliver these vital national services. Otherwise, charging prices below costs will doom the Company to perpetual losses and rising need for grants, loans, and other support.

13. M.U.L. must also improve its operational efficiencies and be more effective in revenue-collections. Improvements from paper-based operations, and more use of widely available electronic systems, payment-methods, and technologies, are vital for a smoother delivery of service to the public, and enhanced efficiency. Finally, M.U.L. must greatly accelerate its progress towards the Montserrat Energy Policy's goal of 100% renewable energy by year 2030. Overreliance on imported fuels, diesel-run generators, and other equipment and vehicles that use fossil-fuels, creates financial pressures, uncertainty, and risks to the environment, to workers, to public health, and to Montserrat's society and economy. Doubling the solar capacity can solve all these problems.

CHAPTER 1: INTRODUCTION

Background

1.1 On the 18th of October, 2001, Montserrat Utilities Limited (M.U.L.) was incorporated as a private Limited Company under the Companies Act of Montserrat (Chapter 11.12 of the laws of Montserrat) and registered at Folio 99 of the Register of Companies. It is solely owned by the Government of Montserrat. Representing the GOM, M.U.L. has two equal shareholders: [1] the Hon. Financial Secretary, MOFEM, and [2] the Permanent Secretary of the Ministry of Communications, Works, Labour and Energy. From July 1st, 2008, the assets and the liabilities of the Montserrat Electricity Services Limited (MONLEC) and the Montserrat Water Authority (MWA) were vested in M.U.L., which then began operating under the Montserrat Utilities Limited Act (Chapter 18.01 of the laws of Montserrat), and the Licensing of Utility Services Act (Chapter 18.02 of the laws of Montserrat).

Overview of M.U.L.

1.2 The Company was established for the central administration and delivery of most utilities (apart from telecommunications) on the island of Montserrat. The purpose of M.U.L. remains to ensure that there is a reliable supply of safe water and electricity to households, to businesses, and to the public services. The Montserrat Energy Policy introduced the GOM's shift in national policy away from fossil-fuels towards green business and renewable energy.

Objectives of the Audit

1.3 **Objectives.** This audit sought to examine the management of M.U.L., including the level of governance, the quality of the service to the public, financial sustainability, and overall performance. The overall objective of the audit was to assess whether the Company is performing efficiently and effectively, and especially in providing water and power services, while remaining financially viable. To answer this overarching question, we considered 4 issues:

[a] Governance: Are the legislative framework and governance effective in supporting the Company to deliver its mandates?

[b] Efficiency: Is the Company applying good practices in managing its operations?

[c] Efficiency: Does the Company manage its finances efficiently?

[d] Effectiveness: Is the Company performing effectively in achieving its goals and targets?

Profile of M.U.L.

1.4 Structure. The active structure of the Company has largely remained functionally oriented, but it has changed gradually over the years to encompass sewage-services, water-services, and electricity-services, all within one corporate umbrella. (See the organisational chart in Diagram 1.1 below.) Currently, the Company is led by a Managing Director, assisted by senior officers, including the Manager of the Water Division, the Manager of the Electricity Division, and the Financial Controller; these officers oversee the other managers/supervisors and their staff. Within the overarching framework of the public sector, the Managing Director reports to the Company's Board, and, in turn, reports to the P.S., MCWLE, and to the Financial Secretary and through the Minister of Finance to the GOM's Cabinet. Diagram 1.1A summarises stakeholders and reporting.

1.5 Roles and functions. Under the Montserrat Utilities Limited Act, M.U.L. is authorised (a) to generate, to transmit, to distribute, and to sell electricity; (b) to prospect and to harness geothermal power or any source of energy; (c) to collect, to treat, to distribute, and to supply piped drinking water; and (d) to collect, to treat, and to dispose of waste-water and sewage.

Diagram 1.1A: Ecosystem Map of M.U.L. and related stakeholders

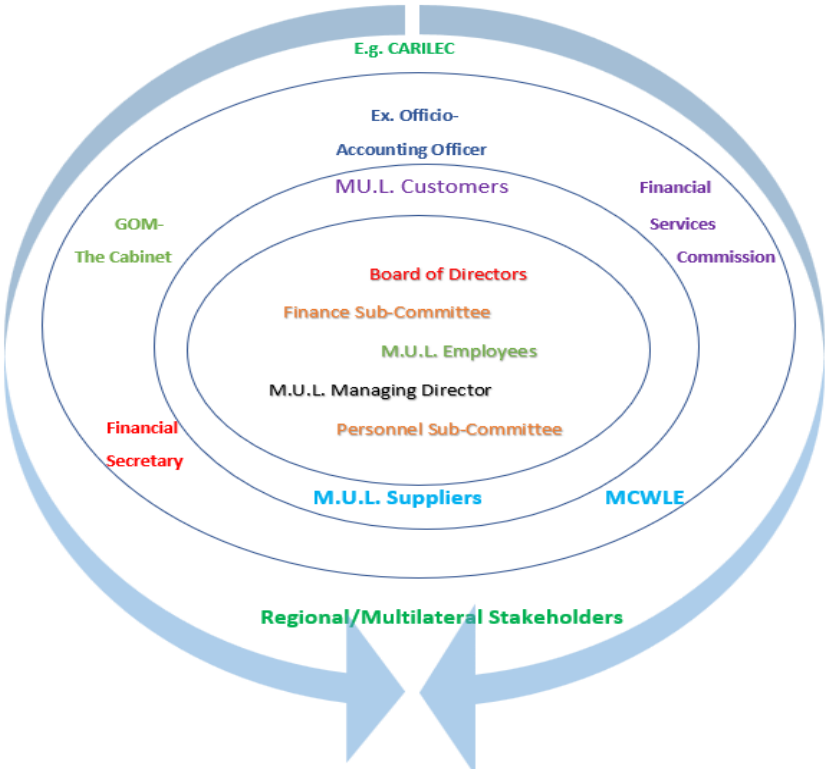
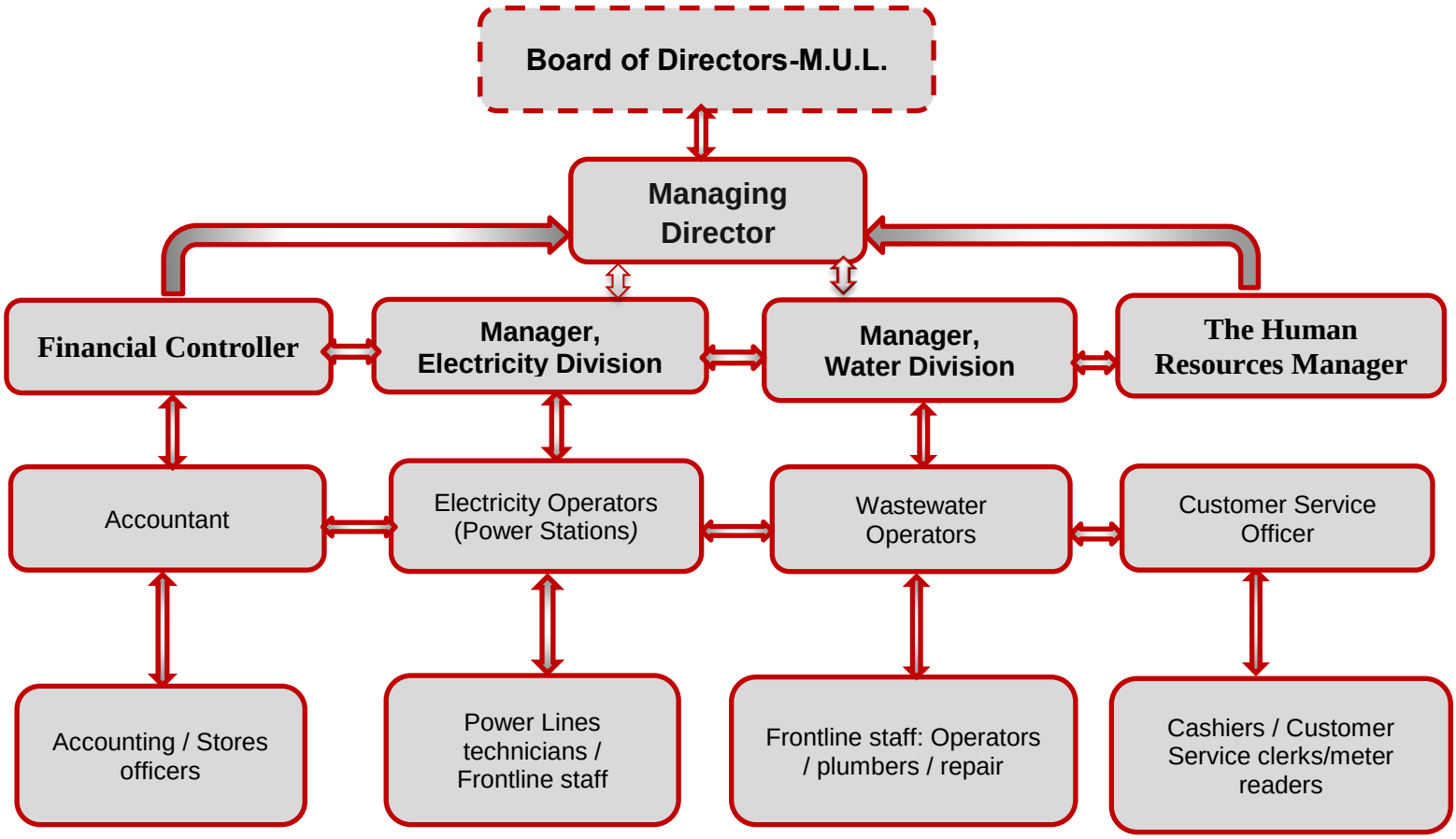


Diagram 1.1B: Internal relationships and reporting structure within M.U.L.

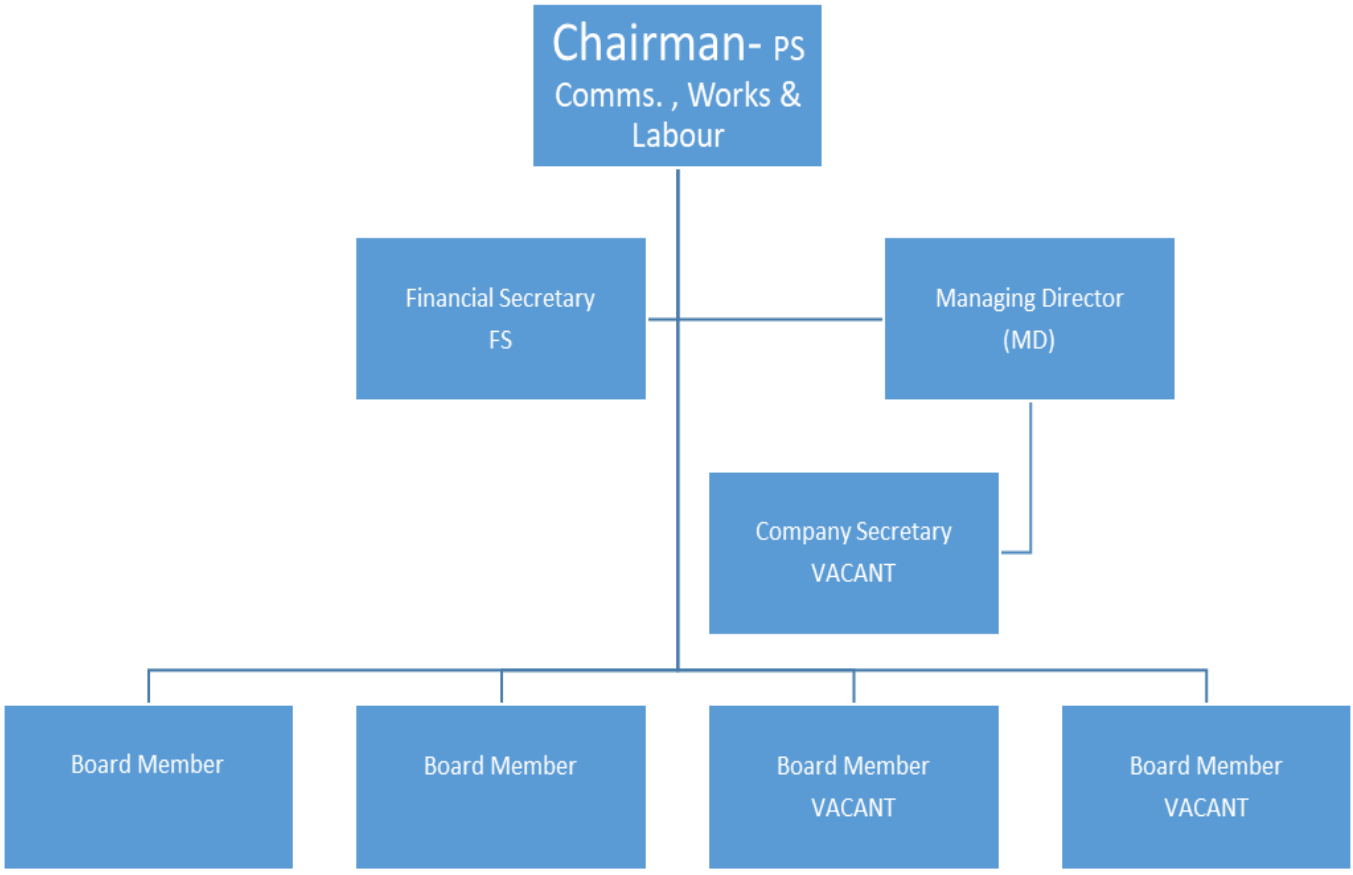


Sources: M.U.L.'s official files; M.U.L.'s H.R. Manager; interviews with M.U.L.'s other Managers.

Note: See Appendix #3 for the Company's detailed organisational charts.

1.6 Changes to M.U.L.'s Board of Directors.

M.U.L.'s current Board of Directors



Sources: M.U.L.'s Corporate Secretary's files; interviews with stakeholders; Board's Minutes.

Note: See Appendix #3 for the Company's detailed organisational/Board/Sub-Committee charts.

Note: The Board was reduced from 8 members to 3 persons from December, 2023, until October, 2024. Most recently, new members were appointed to fill 2 of the 5 vacant seats.

Table 1.3: Overview of M.U.L.'s revenues and expenses: Calendar Years 2015 to 2019; Fiscal Years ending March 31, 2021 to 2022. (Figures in E.C.$)

Financial Year	Year 2015	Year 2016	Year 2017	Year 2018	Year 2019	Fifteen months to March, 2021	Fiscal Year 2021/2022
Revenues & Other Income	16,892,992	16,038,576	16,836,574	19,334,656	18,442,137	20,375,966	18,189,219
Total Expenses	15,772,024	16,154,324	18,005,408	20,520,928	18,628,004	20,913,165	19,623,046
Net Profit / (Loss)	1,120,968 Last year of profits	(115,748) Declining outcome	(1,168,834) Major decline	(1,186,272) Major decline	(185,867) Major improvement	(537,199) Declining outcome	(1,433,827) Major decline

Sources: M.U.L.'s Audited Financial Statements for the indicated calendar-years and fiscal years.

Notes: As of the year 2020, the Company shifted its reporting period from calendar-year to match the GOM's fiscal year, which is April of each year to March of the following year. The 15-month period from January, 2020, to March, 2021, reflects the transitional period, and all the figures in the 2nd column from the right should be adjusted downward (approximately 20%) to equate to a comparable 12-month reporting period.

CHAPTER 2: GOVERNANCE OF MONTSERRAT UTILITIES

Overview

2.1 Montserrat Utilities Limited plays a critical role in the economic and social well-being and development of Montserrat. It is a State-owned monopoly responsible for the administration and delivery of electricity, water, and sewage services on the island of Montserrat. Thus, M.U.L.'s operations affect every employee, every employer, every public servant, every household, and every business/corporation on the island. There are interlinkages with multiple industries: e.g., agriculture, financial services, healthcare, tourism, hospitality, festivals and entertainment, transportation, construction, supermarkets, retail stores, and manufacturing. Unlike typical monopolies, however, M.U.L. does not set its prices to customers, and remains subject to the oversight and decisions of its Board, of the MOFEM, of the Cabinet, and of the Legislative Assembly.

Findings

2.2 Good governance framework overall. The Montserrat Utilities Limited is a statutory corporation and Government owned enterprise. The Board of Directors provide oversight to M.U.L.'s operations. There are clear lines of reporting and accountability as the Financial Controller and other managers report to the Managing Director, who reports to, and is held accountable by, the Board of Directors. The Montserrat Utilities Limited (M.U.L.) Act of 2013 provides the legal framework for M.U.L. The role and functions of M.U.L. are enshrined in this law and supported by other relevant laws and regulations, and regional and international standards, which include the International Financial Reporting Standards. Sub-committees of the Board exist, function, are documented, and have Terms of Reference.

2.3 Meetings of the Board are held, but less frequently than optimal. Up to December, 2023, the previous Board of Directors had an agreement to meet quarterly. However, based on the records, the Board met more often than the minimum of quarterly, but less frequently than the optimal. For example, for year 2022, the average was once every two months. Minutes were recorded and records were generally kept.

2.4 Reduced/Inadequate oversight at M.U.L. Up to December, 2023, the Board of M.U.L. consisted of 8 members. On the 19th of December, 2023, the Board was downsized from eight (8) Directors to three (3) Directors. The remaining Directors are the Financial Secretary

(MOFEM), the Permanent Secretary (MCWLE), and the Managing Director of M.U.L. Therefore, [1] there is reduced oversight of strategic planning, of budgeting, and of projects, [2] there is much more limited representation of stakeholders, and [3] there is a much more limited range of technical and professional knowledge and skills versus what is best practice: e.g., accounting, auditing, legal expert, H.R., I.T., governance, and technical skills for water, for electricity, for renewable energy, for climate-resilience, et cetera. Two new members were added to M.U.L.'s Board of Directors in October, 2024. As a result, the Board now has five of the eight members needed to have a full composition. Without all of the Board Members present, the subcommittees cannot be formed and/or maintained. Therefore, the Personnel sub-committee, the Finance sub-committee, and the Infrastructure sub-committee have not been functioning for nearly one year, as of the time of this report.

2.5 Good internal controls are in place. Generally, M.U.L. ensures that there is clear and consistent segregation of duties within its staff. For example, separate Units perform meter-reading, installations/repairs, accounting, receipts/collections, and billing/customer-service functions. Procedures are in place whereby all incoming correspondence and customers' complaints or reports of faults are documented with the date received, date delivered to the relevant Unit or Division for processing/response, and the date that they were actioned.

2.6 Inadequate security at the Power Station and warehouses. There is no security guard or any one person assigned to manage the movement of vehicles and persons entering and leaving the Power-Station compound. There is no security camera or remote monitoring system for the Power Station. There is no formal logging of keys or who has care of the Company's vehicles at any particular time. This situation heightens the risk of the generators, and other essential tools and equipment being misplaced, damaged, or stolen. The upper level of the inventory warehouse is currently exposed because the galvanised roof is rusty and requires urgent repair.

2.7 M.U.L. has some financial & policy-related constraints. It is outlined in the relevant laws and policies that, ultimately, the Cabinet/GOM makes most of the key decisions affecting utilities. For instance, the Company does not determine the types of services that it oversees, nor does it set all of the prices/rates of the services, the fees, or other interests that it administers. Instead, as with petroleum products in Montserrat, M.U.L.'s tariffs and tariff-rates, as well as allowances, exemptions, and rebates, are all set/overseen by the Cabinet. Thus, M.U.L. is not functioning fully as a normal corporation, but remains heavily constrained by external decisions.

2.8 External financial audits were done, but remained in years-long backlog. During the course of our Fieldwork Stage (during year 2023), audited financial statements were

available only up to March, 2021. By the Reporting Stage of this audit, audited statements for the year ending March, 2022, were completed (draft statements were dated May 29th, 2024). Hence, as summarised in Table 2.1 below, M.U.L.'s financial reporting has long been, and continues to be, very late (with delays up to 4 years), and the external financial audits remain incomplete for the fiscal years ended March, 2023, and March, 2024 (i.e., 2 years behind). Internally, accounting and reconciliations remain several months in arrears. Up to September, 2024, M.U.L.'s website had no financial statements beyond those for the year ended March 31st, 2018 (i.e., over six-year gap).

2.9 Qualified audit-reports. On a number of occasions, the Company's external auditors issued a qualified opinion on M.U.L.'s financial statements. A key deficiency was that they were retained by the Company after the relevant financial year had ended. Therefore, they were unable to be present to confirm physical checks of assets, including the verification of inventories. This puts in doubt the existence of some assets, as well as the completeness and the accuracy of the financial statements.

2.10 Table 2.1: Lags in completing M.U.L.'s financial statements & external audits

Financial Year	Ending Date of Financial Statements	Date of Audit Report	Reporting Lags
2010	December 31, 2010	November 25th, 2014	47 months
2011	December 31, 2011	November 27th, 2014	35 months
2012	December 31, 2012	May 19th, 2015	29 months
2013	December 31, 2013	November 7th, 2016	34 months
2014	December 31, 2014	February 13th, 2017	26 months
2015	December 31, 2015	February 13th, 2017	14 months
2016	December 31, 2016	February 25th, 2019	26 months
2017	December 31, 2017	February 25th, 2019	14 months
2018	December 31, 2018	October 15th, 2019	10 months
2019	December 31, 2019	July 20th, 2021	19 months
2020/2021	March 31, 2021	November 8th, 2022	20 Months
2021/2022	March 31, 2022	May 29th, 2024	26 Months
2022/2023	March 31, 2023	*Not yet done*	16+ months to date
2023/2024	March 31, 2024	*Not yet done*	Over 4 months to date

Note: The Company's financial year was the calendar year until December 31st, 2019. Thereafter, the Company's financial reporting was aligned to GOM's fiscal year, which is April 01st of each year to March 31st, of the following year.

2.11 Little/no rotation of external auditors. External audits have been done by the same private-sector firm for the past 15+ years. This could be a disadvantage as it poses a challenge to the firm's remaining objective. The longer the same auditors remain assigned to M.U.L.'s financial audits, the higher become the risks to independence and the exercise of professional scepticism. M.U.L. is currently paying an average of more than $80,000 for each annual audit. However, the financial audits remain in backlog for at least 2 fiscal years.

2.12 Records are kept, but rely heavily on paper and are not always up to date. The Company has a computer system that is networked for all of its Headquarters employees. Frontline departments largely retain physical records, which must then be delivered to the Headquarters for accounting entries. The Finance Department uses QuickBooks as the software for its day-to-day accounting and operations. There is extensive internal use of telecommunications, software, Excel spreadsheets and Microsoft Word documents; however, during our site-visits, we observed that printing continues on a large scale, and that stacks of paper and files abound throughout the working environment. The Company's employees also use filing cabinets and personal drawers to store physical files. Most transactions and records related to customers continue to be paper-based and in-person.

2.13 Internal meetings are held irregularly, and they are not adequately documented. The senior officers and other employees of the Company that we interviewed confirmed that there is not a regular schedule of meetings: e.g., Managers' meetings happen ad hoc, if at all, and staff-meetings happen occasionally (e.g., only one meeting for the period of January to July, 2024). However, satisfactory Minutes have not been kept for these meetings. Therefore, over the Company's post-merger history of 16 years to date, we were unable to confirm the precise frequency of such meetings, the level of participation, the quality of the discussions, the nature of decisions (if any), or the accountability for specific tasks, responsibilities, deliverables, outputs, or outcomes. This is reflective of an informal culture with spontaneous communication between co-workers, but without transparency or accountability. The lack of frequent/regular Staff/Managers' Meetings also points to a lack of meaningful engagement of employees. Lack of record-keeping, as well as incomplete records/Minutes, also makes it difficult for the participants to remember what was discussed or what was expected to be achieved after each meeting. It also increases the risk of forgetting key details, increases the risks of misunderstandings, and leaves no trail for successors to follow, or even for the current staff to document its experiences, shortcomings, and successes, along with lessons learned in support of preserving institutional memory and reaping long-term benefits from collective wisdom.

2.14 Conclusion re: Governance. The relevant policies, laws and regulations are clear as to structures, roles, and responsibilities regarding utility-services for Montserrat. They also provide for specified Boards and Committees with clear guidelines for their composition, operation, and responsibilities, including the frequency of meetings, and reporting requirements. Despite the availability of telecommunications and electronic systems and software, the Company remains in an outdated modus operandi that is paper-intensive, that emphasises customers' having to make in-person visits and physical payments, and that uses postal mail as the predominant form of outward communication. External audits were completed for the years 2009 to 2019 and for the fiscal years to March 31st, 2022, and provide independent assurance and transparency, but the Company's history of standard reporting and the timeliness of financial audits remain far behind expectations and best practices. These findings set the background for the following two Chapters, which highlight several instances of inefficient operations and considerable degrees of ineffectiveness vis-à-vis mandates as well as all stakeholders' expectations.

Recommendations

2.15 Review the selection & rotation of auditors. The Board should review the process and the criteria for the selection of external (financial) auditors. The policy and practices related to the rotation of audit-firms and audit-partners/directors should be reviewed and updated in line with best practices, regulatory requirements, and international standards. See examples in [3] of Appendix 2.

2.16 Improve the timeliness and quality of financial reporting. The Company should bring its accounting, reconciliations, and reporting, up to date monthly. The Company should aim to publish annual Financial Statements within 2 to 3 months of each fiscal year-end, given that best practices call for quarterly reporting within 15 days of the end of each fiscal quarter, and within 45 days of each fiscal year-end. With each set of financial statements (whether they be audited or unaudited), the Company's Board and Management should issue annual reports and discussions of the Company's achievements, challenges, plans, and performance. These are essential to inform the Board, the MCWLE, the MOFEM, other stakeholders, and the public, as well as to increase oversight of nationally important entities and public services, as well as contributing to the boosting of confidence in governance of public institutions and State-owned companies. **Key enhancements required:** The Company should incorporate strategic planning for, risk-assessment and risk-management frameworks relating to, accounting for, and reporting of, matters of sustainability, including the effects of the climate-crisis, environmental management, and corporate social responsibility.

2.17 Improve the timeliness of audits and publication of audited statements. Greater efforts should be made to plan and to co-ordinate annual financial audits to achieve publication within 3 to 6 months of each fiscal year-end, rather than years later. For each financial year, the Company should agree auditing contracts with the auditors in good time for them to be present for the verification of physical assets, including observations of accurate counts of inventories. The Company should also consider establishing an Internal Audit Unit to provide greater assurance over internal processes, accounting, and reporting, as well as identifying opportunities to improve risk-management and various aspects of the Company's operations. Timely monthly internal accounting and reconciliations will also enable interim audits, review of high-value and higher-risk accounts/transactions, and tests of controls prior to the end of each fiscal year, reducing the auditing work to be done (and the overall cost of audits) at and after each fiscal year-end. The Company's website should be promptly updated with annual reports and audited financial statements each year.

2.18 Improve & document engagement and oversight within the Company. In line with best practice, the frequency of the Board's meetings, Committees' meetings, Managers' meetings, and the staff-meetings should be not less than monthly. All such meetings should be planned and documented, including date, time started and ended, place, participants, topics discussed, decisions made, review of progress against prior meetings' action-items, and details of new tasks assigned, to whom, and with deliverables by which dates. There is need for more regular attention and oversight by the MCWLE and the MOFEM to hold the Company accountable for budgets, for timely and useful reporting, and for the closing of gaps in progress towards objectives, targets, and Key Performance Indicators. Strategic plans and budgets should be regularly reviewed and updated before the periods that they cover expire. Review the performance of the Company and each of its teams, Units, and sub-committees at least annually, including attendance, participation, outputs, outcomes, and lags in decision-making.

2.19 Review and assess each Committee/Board. The Company, the MCWLE, and the MOFEM should individually and collectively review and improve each of the processes whereby candidates are nominated, selected, and inducted into Committees/Boards. It is then essential to good governance to ensure that every Committee/Board has clear mandates, benchmarks, targets, regular meetings, satisfactory attendance, satisfactory records, and documented outputs. It is also important to have regular quarterly reports to the relevant Ministry/Cabinet and annual reports to the public to ensure accountability and transparency at all levels. To achieve value for money, the MOFEM should urgently reassess the existing model of paying members regardless of whether they have meetings, or attend meetings, or meet statutory obligations and best practices, including complete and timely record-keeping, secure document-storage, and all reporting requirements. It

should then advise the Cabinet accordingly: e.g., whether to revise the terms of reference; whether and how to improve the existing model of appointments and remuneration; or whether to adopt an alternate 21st-century model focused on rewards for results achieved, quality of outcomes, client-satisfaction indices, and value added.

2.20 Improve strategic risk-management. An important aspect of governance is a robust framework for identifying, measuring, and managing risks. The Board and each Committee should implement appropriate metrics and dashboards to track key variables: e.g., those relating to [a] financial management, [b] environmental management, [c] sustainability, [d] supply-chains, [e] logistics, [f] social impacts, [g] economic trends, [h] the political environment, [i] compliance with relevant laws, regulations, and standards, [j] I.T. issues and opportunities, and [k] emerging trends, risks, and issues. In turn, policies and plans for addressing each type of risk should be developed and regularly reviewed. Finally, clear mandates, roles, and responsibilities should be assigned to appropriate persons to manage each identified category of risk.

CHAPTER 3: EFFICIENCY IN THE OPERATIONS OF M.U.L.

Overview

3.1 The Company's operations are managed by 5 senior officers: the Managing Director, the Human Resources Manager/Corporate Secretary, the Financial Controller, the Electricity Division's Manager, and the Water Division's Manager. They are supported by an office-staff comprising teams of junior officers and administrative assistants e.g., Accounting, Finance, Customer Service, and Billing. Frontline employees handle repairs to the distribution-networks, meter-readings, responses to clients' fault-calls, inspections of properties, operation of the generators, and management of the various buildings, warehouses, equipment, and inventories.

M.U.L.'s/GOM's Objectives & Planning

3.2 **Overview**. Strategic planning sets the direction for each Department/statutory corporation and how it uses resources. Effective budgeting determines the sources and the uses of funds and holds each Department, Division, Unit, and each employee accountable for its performance. Criteria used for assessing objectives in this audit were: (1) Are there clear, stated objectives that are aligned to the overall strategy? (2) Are there plans detailing how the objectives will be met? (3) Are the related Key Performance Indicators (KPIs)/metrics defined and explained?

3.3 **The GOM's Policy Agenda**. The Cabinet's Policy Agenda is based on the 5 overarching strategic objectives from the national *Sustainable Development Plan (SDP) (2008 to 2020): (1) economic development, (2) social development, (3) environmental management and sustainability, (4) improved governance, and (5) rebuilding of the population. In turn, the MOFEM's central framework for strategic planning and budgeting requires all Departments to show clear links between their budgets and strategic plans and the Policy Agenda. These cascade to all levels of each organisation, including individual employees. M.U.L. is accountable to the GOM/Cabinet through the oversight of the P.S., Ministry of Communications, Works, Labour & Energy, and the F.S., MOFEM.

3.4 **Framework for strategic planning**. In line with the GOM's standard framework, the MCWLE and the MOFEM have a rolling three-year Strategic Plan that outlines strategic priorities, policy-based goals, and KPIs. Each Department's budget and strategic plan are reviewed and revised every year. The Departments and Ministries report regularly to the MOFEM, which a previous audit confirmed has a PEFA-compliant framework for assessing and for prioritising

Departments' requests for new spending. Thus, M.U.L.'s budget is indirectly subject to this process each year, including confirming the actual allocation that the GOM will provide to the Company through the MCWLE, the MOFEM, or otherwise.

3.5 The Company has not explicitly linked all of its objectives to the Policy Agenda / SDP / SDGs. We reviewed many documents of M.U.L.'s budgets, financial reports, and strategic plans spanning years 2010 to 2023. We found that they did not show clear references to the national SDP, to the global S.D.G.s, and to the Cabinet's Policy Agenda.

M.U.L.'s Operations

3.6 M.U.L. has sustained multiple sources of water over the years with the limited resources available. The water-sources include: the Belham Wells, Killikrankie Spring, Forgarthy Springs, Hope Spring, Lawyers Mountain Spring, Olveston Spring, and Quashie. This diversified supply-chain has helped to protect the population of Montserrat from disruptions of water-service, despite aging infrastructure, climatic change, environmental damage, reduced workforce, and other challenges over the years. Over the years, M.U.L. has maintained a high quality of water and sewage services for Montserrat's residents.

3.7 Dangers and poor conditions of the access-pathways to springs and catchments. Our visits to several springs and catchments revealed that access is very limited and dangerous. Workers monitoring the catchments have to park their vehicles at a certain point and then walk the remaining distance (e.g., hundreds of metres) to the springs. The access is via unpaved and poorly maintained footpaths beset by multiple perils: e.g., overgrown vegetation, mud in several sections, stony/rocky surfaces in several sections, no handrails or guide-ropes, no safety-barriers where there are steep slopes beside the footpaths, debris, fallen trees, slippery surfaces, and the narrowness of the pathways. The existing conditions make it difficult to reach springs and catchments for normal operations. However, the difficulties are much greater when repairs and maintenance require tools, equipment, machinery, building materials and multiple workers to be brought to the sites. In cases of emergency, injuries, or rescue operations, there would be likewise considerable challenges in accessing, and in navigating around, these remote sites.

3.8 Extensive electricity distribution-networks in populated areas. The Company has also built and maintained a wide network of electricity lines and poles covering the inhabited areas of the island, before, during, and since the volcanic crisis of the late 1990s. This included major relocation of population and businesses to the northern third of the island, and the

abandonment of most of the infrastructure in the southern two thirds of the island. Throughout the past three decades, veteran technical employees have used limited supplies, spare parts, and materials to maintain infrastructure and equipment years beyond their optimal operating life.

3.9 Insufficient funding and delays of maintenance/renovations. Aging production-related infrastructure, combined with inadequate maintenance, has contributed to large losses of water produced/stored: e.g., from leaks at and around water-sources and reservoirs. Lack of timely asset-replacement and inadequate maintenance of the water-distribution infrastructure have contributed to large losses of harvested water also: e.g., from leaks throughout the distribution-networks. M.U.L. faces recurring losses of potential revenues from water distributed but not reaching paying customers/businesses. Conversely, the costs of lost water are not recouped, raising the effective cost per gallon of water successfully distributed, delivered, and billed to households/businesses/GOM. Also, insufficient funding and lack of timely/adequate repairs and replacement of old assets (e.g., water-pumps, generators, main pipes, equipment, vehicles, and buildings) have led consistently to increased costs of repairs and maintenance. Delayed maintenance costs more than timely repairs. Recovery from systemic failure also costs much more than proactive/preventative maintenance and timely asset-replacement.

3.10 Risks of major systemic failures are high and rising yearly. Montserrat has already faced several major disruptions of electricity-services: e.g., from October, 2016, to March, 2017; and during July, 2023. At the time of the audit, there were 7 engines/generators at M.U.L. (No.1, No.2, No.3, No.4, No.5B, No.6, and No.7). During our Fieldwork Stage (2023), four of them were in operation (Numbers 3, 5B, 6, and 7); one was out of service for complete maintenance (No.4); and two were phased out (Numbers 1 and 2). Of the 4 engines that were operating, two generators have major radiator issues: overheating poses extreme danger to employees as well as high risks of damage/fire to equipment and surrounding buildings.

3.11 Aging/malfunctioning generators. The Number 3 engine was replaced with an old one, and needs a new radiator to produce at its maximum capacity. Generator No. 6's radiator is leaking; if it is used, it has to be refilled overnight for it to operate the next day. This process could take up to 3 hours. Generator No. 7 is long overdue for maintenance. The maintenance reportedly could not be done because there were insufficient funds at the time that it was due. Currently, the materials are available to conduct the maintenance; however, the engine is urgently needed for continued power-supply to customers; hence, there was continued delay in maintenance. Generator No. 5B arrived in November of 2023 and has been working well. Generator No. 5B has been doing most of the work, owing to the radiator-related issues with generators Numbers 3 and 6. The longer that generators remain in continuous operation without scheduled maintenance, the higher becomes the risk of major malfunction or complete failure. Since the mid-1990s, as M.U.L.

has struggled to finance the purchase of new assets, the Company's older generators, vehicles, and equipment have been stretched well beyond their optimal operating lives. This factor also raises risks of repeated malfunctioning of generators and equipment, leading to major systemic failures.

3.12 Difficulty in attracting and retaining talent. For instance, of the eight (8) Power Station Operations employees, seven (7) are fairly new. These seven operators have not received the technician levels 1 and 2 training. Therefore, while they are capable of recording the relevant data, they are not always aware of an equipment/temperature reading being a call for concern. Training is also needed for the best operation and repairs of the newer generators, to equip the staff with the relevant knowledge for basic maintenance. Major overhauls continue to require overseas technicians at considerable expense to M.U.L./GOM. The H.R. records further indicated at least 16 vacancies over the past 8 years and that several posts remained vacant for periods ranging from years to decades. Most recently, the Company lost its Accountant and its Customer Service Officer (a frontline manager), and the post of Managing Director had a short-term incumbent, pending a prolonged recruitment-process to find and to appoint a permanent officer.

3.13 No insurance for several major assets/infrastructure. M.U.L. has not secured adequate commercial insurance coverage on its Transmission & Distribution assets. This leaves both the water-infrastructure and the electricity-infrastructure uninsured and a contingent liability to the Company, and, in turn, ultimately to the GOM. This also heightens the operational risk, should any major damage be done to any of these facilities. Responses to, and recoveries from, disruptions of service depend heavily on the quality, the number, and the availability of local technicians, of equipment, of vehicles, and of spares, all of which have faced challenges related to funding, to stocking, and to maintenance over the past two decades. The primary responsibility for the development and implementation of controls to address operational risk is assigned to the Board of Directors and senior managers.

3.14 Limited insurance for major assets: not all risks are covered. M.U.L. has insurance policies in place to cover many of its assets and several other risks (e.g., buildings, vehicles, equipment, furniture, fixtures, inventories, cash in transit, cashiers, public liability, employer's liability, etc.). However, it has not secured adequate insurance to cover all of its fixed assets comprehensively, as there are key exclusion-clauses for each policy (e.g., risks from earthquakes and all volcanic activities are explicitly excluded from coverage).

3.15 Under-insurance for major assets: current values versus historical values. Moreover, our review revealed that there is a huge gap between the values insured (e.g., only $30.4 million for fixed assets, as of premia paid for year 2024) and the values at risk. We compared the

historical costs of total fixed/long-term assets (e.g., approximately $77 million at March 31st, 2022) versus their depreciated book-values (e.g., $44 million at March 31st, 2022, indicating a gap of at least $33 million versus original costs). We further compared the Company's book-values of assets versus the current replacement-costs for the same or similar assets (likely to be in the region of $100 million to $200 million overall, given that some of the Company's assets date from as far back the 1970s and many others date from the 1990s). The findings are stark: not even book-values are fully insured, never mind the total current-replacement value at risk.

3.16 Illustration of under-insured risks: For example, a vehicle/equipment that originally cost $100,000 might be written down to a book-value of $60,000 after two years; however, the risk/value to be insured is the current (typically, much higher) cost of the same/similar type of vehicle. This also heightens the ultimate financial exposure to the Company and, by extension, to the Government because under-insurance is further penalised, in the event of an actual loss, by adjustments to the amounts paid for insurance-claims. This means that the Company will get only a fraction of the (under-) insured value in the event of claims. E.g., if the current replacement cost is $150,000 for a vehicle/type of equipment and the insured value is $100,000, the under-insurance factor is 33%, and a claim against the insured value of $100,000 could be reduced by up to 33% to arrive at the actual pay-out to the Company in the event of loss or damage to the insured asset. The ultimate gap between current replacement-value and the actual insurance pay-out of $67,000 in this case would be more than 50% of the current cost of replacing that asset. M.U.L./GOM would bear the full cost of that shortfall.

3.17 Meter-readings continue to be done manually and are subject to several risks: e.g., human errors, bad weather, environmental conditions/degradation, accessibility of meters, availability of employees, as well as mechanical faults (especially on old meters). This process is also extremely inefficient administratively and requires M.U.L.'s staff to waste hundreds of person-hours per year to input, to sort, to process, and to store physical files. Sometimes, there are operational challenges arising from vacancies or absences by assigned employees, increasing the workload for the reduced number of available meter-readers. In turn, many of the Company's monthly bills to customers continue to be printed on paper and distributed by the postal service, requiring additional time, labour, and costs.

3.18 M.U.L. has no dedicated Compliance/Legal functions. Contrary to best practice, M.U.L. has no Compliance Department and no Legal Department. Therefore, M.U.L. is heavily reliant on external legal services should it wish to pursue legal cases. The lack of effective and consistent enforcement can create complacency among delinquent customers when it is perceived

and demonstrated that no serious consequences will follow prolonged defaults in meeting payment obligations, or at least negotiating reasonable settlements with M.U.L.

3.19 Customers have strong interest in online payments and electronic channels. Our previous study of M.U.L. (year 2017) surveyed hundreds of customers and confirmed that, in line with social and economic trends, more and more customers wanted to use non-cash methods of payments, online accounts, and electronic channels for communication. These findings were consistent with those identified in the broader national study that we did regarding methods of payment (2016/2017). The Company's own data since then demonstrate that more and more customers have switched to online banking. Whilst the number of cash-payments declined by nearly 3,000 per year (during years 2015 to 2022), the number of payments via online banking/bank-accounts more than tripled in just 5 years (years 2017 to 2022). [See Table 3.1 below.] In September, 2023, for example, the value of cash-payments totalled $383,151, whilst cheque-payments totalled $391,029 and payments via bank-accounts/online banking totalled $509,359, well ahead of any other traditional method of payment. However, even as scores of smaller entities (both in the public sector and in the private sector) in Montserrat have adopted card-payments since year 2017, the Company still has no provision for debit-cards or for credit-cards either online or in person at its main office/cashier-stations.

3.20 Table 3.1: Customers' Transactions by Type of Payment (years 2015 to 2022)

YEAR	ONLINE BANKING / BANK ACCOUNTS	CASH	CHEQUE	**TOTAL**
2015	2,910	24,839	10,675	**38,424**
2016	3,087	24,444	11,322	**38,853**
2017	3,046	24,051	11,072	**38,169**
2018	3,310	24,847	5,797	**33,954**
2019	4,248	24,585	10,135	**38,968**
2020	5,003	21,026	8,592	**34,621**
2021	8,996	21,625	8,395	**39,016**
2022	9,554	21,995	7,667	**39,216**
TOTAL	**40,154**	**187,412**	**73,655**	**301,221**

7-year change: 228% increase (11)% decline (28)% decline 2% increase

Note: every client with a chequing account (or a savings account) automatically has the option of switching to free online banking and online bill-payments, with an immediate saving of costs. The

data-series confirms that many such clients switched from paying by cheques to paying by online banking/bill-payments.

3.21 Low public profile; Little/no use of online presence, payments, and social media. The Company has formal communications (outward) with clients mostly by postal mail; clients also have (inward) communication with the Company by telephone, by email and/or in person (most commonly). However, up to year 2017, our previous study found that the Company's website was hardly used, online accounts were technically available but were not activated, and M.U.L. had not been very active in social media. Online search-results were dominated by items from other entities referring to the Company rather than items from the Company itself. The Company has, from time to time, used the local radio-station to broadcast utility-related information, but this is not reaching all of the population, because [a] many persons are listening to the radio infrequently, if at all, [b] many persons do not hear all of the episodes of the Company's broadcasts, and [c] most persons surveyed/interviewed reported that they use and prefer several other modes of communication. This study found little improvement since year 2017, reflecting slow/no implementation of many of the previous performance audit's recommendations.

3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed. We have noticed a number of updates to content, along with several shortcomings with the current website: e.g., some buttons do not work; some links/sections have no information; weaknesses in some parts of the writing; limited information in most sections. It still does not provide online accounts/log-in for clients, but it does enable electronic submission of queries. Moreover, it does provide copies of forms for download, as well as electronic versions of the forms, and these are editable or fillable online. This was an improvement since our previous study of the Company. However, a major weakness is that most of the content in the website is years out of date. E.g., it continues to refer to the old location at St. Johns even though more than a year has passed since the relocation to the Red Cross building at Brades. E.g., We also found that the Company has helpfully provided some publications, including audited Financial Statements for years 2010 to 2018; however, this also shows that the content is years out of date as audited Financial Statements (as of August, 2024) were available up to year 2021/2022 and Management Accounts were available up to 2023/2024. Within the Publications section, the most recent item [Water Consumer Confidence Report (2020)] was updated to the website on December 01st, 2021, well after the period to which it related, and now approaching three years since the last update.

Recommendations

3.23 Fully Integrate M.U.L.'s objectives with the Policy Agenda/SDP/SDGS. Ensure that the objectives for the Company are clearly defined, measured, and assessed each year, and that each of them is more explicitly linked to the Cabinet's Policy Agenda. Further links to the national SDP and to the relevant global SDGs should be made also, along with specific actions to achieve both sets of goals/targets. This will contribute to the three intertwined objectives of [a] policy-coherence between Departments/Ministries, [b] vertical integration across all levels of the GOM, and [c] a whole-of-Government approach to the national objectives and outcomes, including measurable progress towards the 2030 Agenda.

3.24 Clarify objectives and KPIs. Review each objective for greater clarity and in practical terms. Ensure that every objective for the Company and for the MCWLE has KPIs and that all KPIs clearly support objectives. The Company and the related Departments/stakeholders should align and coordinate their strategic plans, objectives, KPIs, and targets.

3.25 Review and improve the KPIs over time. At least annually, the Company, the MCWLE, and the MOFEM should review and assess the KPIs to make them clearer, more measurable, more relevant to objectives, and focused more on strategic outcomes. Add new KPIs where the environment fundamentally changes (e.g., new technologies; COVID-19 or other pandemics; new public-health regulations; emerging social/economic/business trends and niches; changing demographics; climatic changes and local impacts).

3.26 Set, review, and upgrade standards of service. The Company should set and review standards for service in each Division and in each part of its operations, aiming to achieve consistent achievement in practice, and then proactively raising standards over time. Develop and report measures that are client-centric, including standards of service for such key areas as (1) average timeframes for responding to queries/messages (e.g., by telephone, by mail, and by electronic mail), (2) average timeframes for processing requests for new accounts, for new connections, and for reconnections, (3) number of households/public buildings/businesses visited each Quarter/year, (4) number of public-education initiatives and, more importantly, their participation, impact, and outcomes, (5) measures of client-satisfaction, (6) measures of employees' satisfaction, and (7) numbers of disputes/complaints/objections (both new and brought forward), as well as (8) average timeframes for resolution, and (9) indicators of satisfactory outcomes (e.g., cases litigated versus cases resolved without litigation; successful cases versus those not completed versus those awarded in favour of the customer/other stakeholders).

3.27 Improve the scope and timeliness of reporting of performance. The Company, along with the MCWLE and MOFEM, should regularly measure, monitor, assess, and report its actual performance and progress against all of the relevant objectives and KPIs, the SDP, the S.D.G.s, the Policy Agenda, and the Montserrat Energy Policy, including public Annual Reports. The Quarterly Reports, for instance, should be complete and timely. Annual reports should be published within 3 months of the end of each fiscal year. Go beyond mandatory/statutory reporting (e.g., to the Legislative Assembly) to include broader accountability and transparency to the public. Encourage and enable active participation of stakeholders in understanding, reviewing, and assessing performance. This would help to build trust in public institutions and more confidence about the governance of taxpayers' dollars. It will also contribute to effective and timely national statistics, compilation of Voluntary National Reviews, and better interfaces with partners within the O.E.C.S., within the CARICOM, and within the U.K. and British Overseas Territories, as well as regional and international tax-bodies, multilateral agencies, donors, authorities, and regulators.

3.28 Broaden the scope for feedback from the public/stakeholders and communicate through multiple channels. The Company should periodically seek, document, and report on feedback on its services and encourage inputs from employees, from customers, and from other stakeholders: e.g., through annual surveys. Beyond the option of a regular radio programme both for public education and outreach, the Company and other key stakeholders should collaborate in reaching and engaging individual clients, current and potential commercial clients, patrons, promotors, sponsors, hospitality providers, accommodation providers, and other categories of business stakeholders, using a range of available channels: e.g., websites, social media, telephone, mobile marketing, email, radio, news-broadcasts, audio, video, and other media. It is important to have targeted communication for each category of stakeholder, and to address the specific needs, concerns, and issues related to different types of customer (e.g., households versus small businesses versus industrial clients versus public-sector entities).

3.29 Enable full electronic reporting, payments, and online accounts. In line with the capabilities of e-Government, the goals of the Montserrat Information & Communications Technology Policy, and the rights of taxpayers in the Income and Corporation Tax Act, as well as the Electronic Transactions Act, the Company should complete the journey towards full online functionality of its website and systems, as soon as possible. Enable clients to submit payments and queries online and via email, including online/electronic submission of all documents and forms. This would greatly reduce the time and effort consumed by the Company's staff in receiving, handling, sorting, storing, and scanning of clients' physical documents. It will also give clients much more convenience and ease in timely bill-payments, both on the island and from wherever in the world they happen to be, as many clients travel overseas, reside overseas full-time, or split their

periods of residence across more than one country. Convert all forms to fully editable and configurable electronic/online formats, eliminating the need for printing, for manual filling, and for in-person delivery/submissions. Enable online payments, payment by credit-cards, and payment by debit-cards, thus widening the range of options available to clients, and thereby boosting collections, and improving compliance. Such diversity of payment-options and convenience could also prevent new arrears, improve collections of existing arrears, and better serve overseas clients.

3.30 Review and update all insurance-policies; self-insurance. The Board should oversee a comprehensive review of all long-term assets and insured risks of the Company. Insured values should be updated to reflect the current replacement-values of assets insured. Furthermore, the Board, together with the MCWLE and the MOFEM, should establish the full extent of non-insured risks/assets, under-insured risks/assets, and the ultimate contingent liabilities facing the GOM and Montserrat. These facts should then feed into strategic discussions with key stakeholders, including the FCDO, to develop national resilience, self-insurance, and reserve-funds to reduce the gaps identified between values at risk and values effectively insured with third parties.

3.31 Urgently upgrade, and maintain safe access to, all springs and catchments. The Company, along with partners such as the MCWLE where necessary, should urgently widen and secure all routes and footpaths to the 6 springs and catchments that are in use for the national water-supply. These routes and footpaths must be made large enough to facilitate both pedestrian access and the required transportation of tools, equipment, machinery, and materials to and from these vitally important sites. This strategy would, first of all, address and minimise risks to the health & safety of frontline workers and first responders. Secondly, better maintenance of safer and wider access-pathways would also enable much easier maintenance of the springs and the catchments themselves. Thirdly, improved access would allow for effective and timely responses to emergencies, accidents and injuries, and post-disaster surveillance and recovery operations. Fourthly, plan and implement more frequent cleaning, repairing, and de-bushing of pathways and catchments, clearance of vegetation in and around catchments, and removal of debris, trees, and roots within catchments and adjacent to their perimeters. Preventative maintenance can greatly reduce the environmental hazards to people and to infrastructure, while helping to save on the long-term costs of current and future damage to springs, to catchments, to water-pipes, to access-paths, and to reservoirs. Better securing of catchments and springs would prevent intrusion by unauthorised persons as well as limit risks of damage and contamination from animals, from plants, and from trees.

3.32 Reap the large cost-savings and benefits of minimising paper and postal mail. The widely available electronic channels could be used immediately and with little or no net extra time, costs, or effort. (E.g., for communication with customers, for issuing information to the public,

for internal document-handling, for customers' e-submission of forms, and for online banking for bill-payments.) Indeed, they would provide major opportunities for cost-savings to the Company, to businesses, and to consumers. A WhatsApp telephone call, a Zoom meeting, and e-mail cost zero, for example, but allow for immediate and convenient communication with customers, including those who are overseas, or who are not available during the Head Office's/cashiers' limited work-hours. The Company and other public entities could greatly reduce the time, the cost, the space, and the effort required for paper, stationery, postage, printing, energy, physical delivery, & physical storage. Electronic formats and storage have additional benefits such as avoiding the deterioration of physical records and the health-risks to employees from dust, mould, insects, and other issues relating to large accumulations of old documents.

CHAPTER 4: EFFECTIVENESS OF M.U.L.'s OPERATIONS

Overview

4.1 The Company has a portfolio of three utilities to administer: water, sewage, and electricity. As of September 30th, 2024, the human resources within the Company's organisational chart were limited to 85 posts for employees; 8 of these were vacant. The 77 employees included 65 permanent and pensionable, 11 casual workers, and 1 contract-officer. All other required labour, equipment and materials are procured and outsourced through contractors, consultants, and suppliers. Financial management is discussed in Part 1 of this chapter. Other aspects of management and performance are presented in Part 2 of this chapter.

Part 1: Financial Management

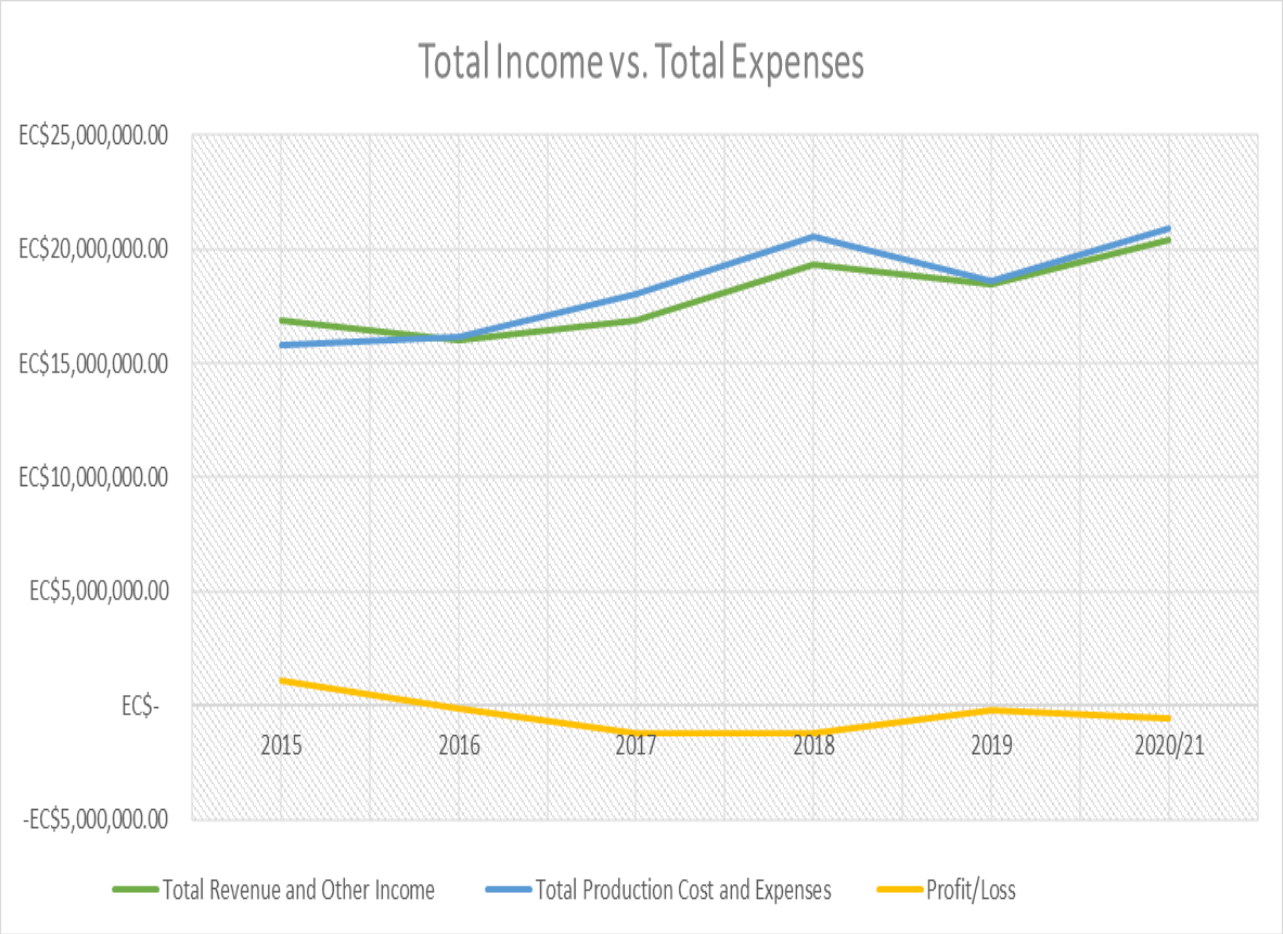
Findings of the Audit

4.2 **There are clear guidelines for financial management**. The Company is governed by internal financial and accounting policies as well as being subject to oversight through the GOM's policies and procedures for managing its finances and its risks. The public sector is subject to relevant laws and regulations such as the Public Finance (Management & Accountability) Act of 2008, and the related regulations of 2009. As a Company, M.U.L. is also subject to corporate regulations through the Companies Act and the Financial Services Commission, and to International Financial Reporting Standards for its accounting and financial statements (versus IPSAS for the public sector). The MOFEM, through the Company's Board and the MCWLE, oversees the Company's budgets and spending.

4.3 **Positive top line: Long-term trend of steady revenues**. Our review of the Company's budgets and financial statements showed that core revenues (i.e. Water Revenues plus Electricity Revenues, but excluding Fuel Surcharge) have risen slightly during some years of the past decade, but declined slightly in other years. Overall, the core trend shows stable revenues. [See the Chart at paragraph 4.5 below; see also Table 1.3 in Chapter 1.] E.g. #1, core Water Revenues rose from $3.061 million (2019) to $3.077 million (2021/2022); e.g. #2, core Electricity Revenues (excluding Fuel Surcharge) rose from $5.89 million (2015) to $6.22 million (2016). E.g. #3, Total Revenues & Other Income increased from $16.8 million in year 2017 to $18.4 million in year 2019. Slight decreases were observed in some of the other years.

4.4 Positive middle line: Operating Divisions reliably contributed to operating surpluses. The Water Division and the Electricity Division have consistently produced a Gross Operating Profit: i.e., managing their direct expenses within their direct revenues. As most of the Company's revenues depend on the Electricity Division, the bulk of the operating surplus also comes from sales of electricity. We observed this positive achievement in every year reviewed (audited up to fiscal year 2021/2022). E.g., In year 2019, the Electricity Division had revenues of $14 million versus Production Costs of $11.4 million. However, this divisional operating surplus of $2.6 million was not enough to cover all of M.U.L.'s Other Costs and Administrative Expenses, which totalled $4.1 million that year. This explains why, ever since year 2016, M.U.L.'s total expenses have continually exceeded its total revenues. Furthermore, rising costs from suppliers (versus fixed revenue-rates for M.U.L.) have also eroded the Divisions' surpluses. In the most recent audited year, ending March, 2022, the combined surpluses from the 2 Divisions declined by more than $1 million: falling to $2.18 million (12 months) from $3.33 million in the prior fiscal period (15 months).

4.5 Chart: M.U.L.'s Annual Revenues, Expenses, & Net Losses (years 2015 to 2021)



Sources: Audited Financial Statements for Montserrat Utilities Limited.

4.6 Negative bottom line: Long-term trend of net losses. Our review of the Company's audited financial statements confirmed that M.U.L. had had some prior years of net profits up to year 2015. However, from year 2016 to date, the annual outcome has been a comprehensive net loss. [See the chart at paragraph 4.5 above; see also Table 1.3 in Chapter 1.] The accumulated deficits of the past 8 years have replaced the retained earnings of earlier years. The continued rise in expenses and costs to the Company against fixed revenues has created a structural (non-temporary) --- and widening --- gap between total revenues and income and total expenses. In the most recent audited year, the comprehensive net loss almost tripled from $(487,114) for the 15 months to March, 2021, to $(1,411,070) for the 12 months to March, 2022. Subsequent budgets forecast even larger net losses.

4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. The domestic revenue-rates for electricity have not changed since February 01, 2001, the revenue-rates for water have not changed since January 01st, 2004, and the commercial revenue-rates are the same since year 1994. The rates of revenue are key drivers to the financial performance and sustainability for all utility-companies. The outdated prices to M.U.L.'s customers have not kept pace with the rising costs from M.U.L.'s suppliers. Over the years, the wholesale prices of oil and of gas have been fluctuating frequently, and this has a direct effect on the Company's cost of producing energy and pumping water. In less than 20 years, the international price of oil has displayed a range of increases over 400%: from under U.S.$30 per barrel to nearly U.S.$150 per barrel (e.g., July/August, 2008). However, the ultimate decision-making power over M.U.L.'s local revenues/prices to customers has resided with the Cabinet/Government of Montserrat.

4.8 Other countries, including British Territories, regularly raise their rates to cover costs. Electricity prices around the O.E.C.S. vary between USD$0.35 to USD$0.39 per kilowatt-hour, whilst Montserrat's electricity prices per kilowatt-hour remain frozen with the Domestic Rates at U.S.$0.18 and U.S.$0.21, the Commercial rate at U.S.$0.20, and the Industrial rate at U.S.$0.18, all well below M.U.L.'s average total operating costs per unit. The Cayman Islands Government, for example, does annual reviews of utility-prices to keep them in line with the actual costs of providing the services. As another example, the Bermuda Electricity Company has several cost-recoveries: much higher rates for customers with higher levels of usage; a surcharge for fuel; a levy towards repairs and maintenance of the equipment and the infrastructure necessary for utilities; a tax on utility-bills (an additional revenue for the Government); and a levy to cover the costs of independent regulation. (See https://belco.bm/know-your-rate-and-bill/ for details.)

4.9 Long-term trend of slightly declining utility-usage. As M.U.L.'s prices to customers have remained fixed for more than 20 years, total net revenues could increase only through increased numbers of customers and/or increases in the volume of units of water/electricity consumed per existing customer. Here, our findings were mixed. For the period of year 2016 to year 2023, the Company's records showed that the number of domestic electricity-customers indeed increased from an annual monthly low of 2,879 (in July, 2016) to an annual monthly high of 3,031 (in March, 2023). In terms of kilowatt-hours (kwh) consumed, however, demand by domestic customers actually decreased from an annual total of 5.77 million kwh in year 2016 to 5.44 million kwh in year 2022. Across all categories of customers, total national usage declined from 12.26 million kwh in year 2016 to 11.93 million kwh in year 2022. Within the overall trend, analysis by sector showed declining consumption by households; this could reflect savings from more energy-efficient appliances (e.g., the GOM's programme that waived taxes for new purchases of white goods) and the benefits of switching to LED bulbs (e.g., the MCWLE's free bulb-exchange programme). However, this reduction was offset by rising consumption by businesses, reflecting major projects in progress, as well as the post-pandemic rebound in the economy from tourism and hospitality.

4.10 The administrative expenses continued to rise rapidly. E.g., For the 7 years 2015 to 2021/2022, Administrative and Other Expenses increased by 37.40%: rising from $3.25 million to $4.46 million, or more than $1.2 million. This trend contributed in a large way to the Company's escalating net losses in recent years. For the year ended March, 2022, the larger lines within this category of expenses were: Head Office employees' salaries and benefits (over $2.4 million); repairs and maintenance ($538,861); insurance-premia ($331,565); rent, leases, and utilities (over $288,000); Bad Debts expense (i.e., provision for uncollectable receivables from customers) ($204,467); depreciation expense ($172,028); interest on the long-term loan ($155,523); and audit-fees ($81,009).

4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. To domestic customers, the largest portion of the billed amount relates to charges for fuel. This has varied widely, posing a recurring risk to the Company's finances and a shock to customers in times of rising fuel-prices. For instance, the revenue-rate per kilowatt-hour is 55 cents (for domestic usage above 75 kwh per month). However, the Fuel Surcharge per kwh has ranged from 59 cents to $1.19 in just a 12-month period (August, 2022, to August, 2023). This means, that even at its recent low, the Fuel Surcharge more than doubled the effective cost to households; at its peak, the cost of fossil-fuels to generate electricity more than tripled the effective cost to households. However, the Fuel Surcharge is simply a pass-through cost from M.U.L. to the supplier, Delta Petroleum (Montserrat) Limited, and is not a true revenue to M.U.L. itself. This also illustrates that

the high reliance on imported fossil fuels continues to pose serious risks to economic resilience, to households' budgets, and to national security.

4.12 Conservative approach to cash-management. Over the years 2015 to 2022, the Company's cash-resources totalled an average of more than $5 million. A portion of this total was held in a segregated account for pre-merger employees' retirement-savings. Excluding this amount, the operational cash-balances consistently exceeded the $3 million minimum that the Company aims to hold at all times. A part of this was reserved for loan-payments; another part was reserved for replacement of old vehicles. This reflects a risk-averse strategy amidst an environment of multiple uncertainties, including rising prices from suppliers, supply-chain shocks, risks to Accounts Receivable and collections, and monthly fluctuations in fuel-costs, which must be paid to Delta Petroleum in advance of the related billing and cost-recovery from M.U.L.'s customers (a month or more later). It is noteworthy that the Company did not resort to overdrafts, lines of credit, or high levels of short-term debt.

4.13 Low levels of debt; low cost of debt. The Company has benefited from grants and contributed capital from the GOM, which remained the sole shareholder throughout the history reviewed, (e.g., accumulating over the years to $40.57 million as of December 31st, 2018,) greatly reducing the need for external debt-financing. In the past 15 years, we identified very few loans for the Company, apart from two relatively small ones: [1] E.C.$500,000 was borrowed from the Montserrat Social Security Fund to procure 5 new vehicles to replace several old ones; this loan was fully repaid during the years 2018 to 2023. [2] The Company obtained financing of $5.92 million from the Caribbean Development Bank (mostly to pay for a generator to replace an old one). This was achieved on very generous terms and conditions, including [a] a 30-year term; [b] a 10-year moratorium on first repayment; [c] an interest-rate of only 2.50% per year. The level of debt, as a percentage of total assets, remained very low throughout the past 15 years. E.g., in years 2009 and 2010, there were no debts/loans payable. E.g., in more recent years, the debt-to-assets ratio peaked at just over 10%: $6.16 million of long-term debt versus total assets of $57.56 million at December 31st, 2018.

4.14 Balance Sheets had a trend of strong and improving Current Assets/Ratios. A common measure of a company's liquidity and ability to handle its obligations is the ratio of Current Assets to Current Liabilities. In accounting terms, "current" means "within 12 months of the Balance Sheet date", and refers to short-term items. For M.U.L., the trend from years 2008 to 2022 remained strong in this regard: ranging from [$8.23 million / $2.89 million =] 2.85 at December 31st, 2009, and remarkably strengthening to [$11.88 million / $1.57 million =] 7.57 by December 31st, 2018. In the most recent audited financial statements available prior to the completion of this audit-report, the Current Ratio declined from that multi-year high, but remained strong, with

further strengthening of Current Assets to $13.023 million versus Current Liabilities of $3.42 million (as at March 31st, 2022). This yielded a current ratio of 3.81, which remained far above the break-even point of 1.00. This indicates a core operating strength that the Company was well able to pay its essential short-term operating expenses, although not all of its long-term costs, and especially the capital spending necessary to maintain and to upgrade the infrastructure for utility-services.

4.15 Balance Sheets showed a long-term trend of satisfactory Quick Ratios. A stricter measure of a company's liquidity and ability to handle its obligations is the ratio of the most liquid Current Assets to Current Liabilities. Here, for the purposes of Quick Ratios, the most liquid items in the Balance Sheet are Cash & equivalents, Accounts Receivable, and short-term marketable securities. For M.U.L., the trend from years 2008 to 2022 remained strong in this regard: ranging from [$6.427 million / $2.888 million =] 2.22 at December 31st, 2009, and remarkably strengthening to [$8.204 million / $1.575 million =] 5.21 by December 31st, 2018. In the most recent audited financial statements available prior to the completion of this audit-report, the Quick Ratio declined from that multi-year high, but remained strong, with Quick Assets of $7.413 million versus Current Liabilities of $3.423 million (as at March 31st, 2022). This yielded a current ratio of 2.17, which remained far above the break-even point of 1.00. This indicates a core operating strength of the Company: being able to meet short-term operating costs, despite challenges with meeting total organisational expenses, and long-term capital expenditures.

4.16 Large financial losses with the C.L.I.C.O. group. Historically, the Company offered its employees a generous defined-benefit pension-plan. However, during the Great Recession and the accompanying Global Financial Crisis (c. years 2008 to 2010), the service-provider, Colonial Life Insurance Company, experienced grave difficulties. Hence, clients across the region, including local entities such as M.U.L., the St. Patricks Credit Union, and the Montserrat Social Security Fund, lost all or most of their investments and pension-plans held with the C.L.I.C.O. group of companies. Since then, the Company has maintained two retirement-savings plans for its employees: [1] from early in year 2012, it suspended contributions to the plan with C.L.I.C.O., and adopted in in-house plan in the form of a segregated local savings-account for the pre-merger legacy employees; and [2] an external defined-contribution pension-scheme held with the Sagicor group of companies for all other full-time employees.

4.17 Pension-liabilities remain large but is gradually declining. The total pension-obligations have remained large, both as a percentage of total liabilities, and as a lien on a portion of the Company's total cash-resources. For the post-merger period to date, the total accrued pension-obligations on the Company's Balance Sheets have ranged from $3,326,943 at December 31st, 2010, to $2,127,036 at March 31st, 2022, a reduction of $1.2 million. These amounts represented 44% and *16% of the Company's total liabilities, respectively; to be directly

comparable, (since there were no loans payable up to year 2010,) the figure for March, 2022, equalled *29% of the non-loan total liabilities. The related segregated cash-balance increased from $908,509 at March 31st, 2021, to $1,382,434 at March 31st, 2022, representing 14.94% and 29.73% of total cash-resources at those dates, respectively. Nonetheless, although the ultimate pension-costs for employees joining the Company since year 2009 have effectively been transferred to a third party to manage, the Company retains the assets and the risks related to the retirement-savings plan for the legacy employees. As no new participants have been admitted to this legacy-plan, the total pension-liabilities and costs are gradually reducing over the years as legacy employees continue to leave the Company, and receive their full account-balances upon exit.

4.18 Stand-alone performance is difficult to assess against a consolidated budget. Historically, separate accounts and financial statements were kept for the then Montserrat Electricity Services Limited (MONLEC) and the then Montserrat Water Authority. However, with their merger under the incorporation of M.U.L., consolidated budgets and financial statements are prepared, combining revenues and expenses for both entities. For analysis of each utility-service (now called a Division), this makes it difficult to analyse and to assess all aspects of budgets versus actual revenues and expenses. For most users of financial reports, it also makes it difficult to see the true net revenues and expenses of the Water Division and the Electricity Division, respectively, each as an economic entity viewed as a separate functional whole [a] versus what pertains to other parts of M.U.L. and [b] versus the M.U.L. consolidated as a single legal entity.

4.19 Outdated receivables from customers, plus current amounts, are large. Year after year, the annual audits of the Company's accounts show that customers' unpaid bills reflected large balances. The failure to keep accurate and up-to-date records in some cases, shortfalls of capacity or actions to achieve timely assessments and enforcement in other cases, and, at times, delays in communication, are some of the factors leading to uncontactable/uncooperative clients/tenants and uncollectible revenues. Consequently, from time to time, over the years, the Company/Board has approved the writing off of significant amounts of old accounts receivable. However, while they improve the fair presentation of the Company's accounts, write-offs do not address the underlying causes of unpaid current bills and accumulated uncollected receivables. Their continued upward trend reflects this.

4.20 Current receivables (unpaid bills) from customers kept rising in recent years. In particular, we found that, in just 10 months (March, 2023 to January, 2024), customers' arrears owing for the Water Division increased from $1,376,967 to $1,500,295, whilst customers' arrears owing for the Electricity Division rose from $1,978,099 to $2,404,062 in the same period. By contrast, unpaid amounts related to Vacant Lots remained consistently above $1 million in the years 2015 to 2024, reflecting no progress with those collections for more than a decade. The total

accumulated arrears of these three types of accounts receivable soared from $3.62 million at December 31st, 2015, to $4.9 million at January 31st, 2024.

4.21 Amounts receivable from employees are well managed. From time to time, in the normal course of business, employees request advances of salary or assistance for various reasons, including personal emergencies, educational programmes, and medical bills. Our review of the relevant files showed that there are well established procedures for documenting and approving all loans or advances to employees and that these amounts are generally repayable in the short term. On average, in recent years, these amounts have been relatively small, and have been repaid through payroll deductions according to agreed timeframes. However, we did identify that some old receivables were not collected and/or were not properly documented/actioned, indicating that there were deficiencies in management of Staff Receivables in some of the previous years / decades.

4.22 Insufficient verification of assets; doubtful valuations. Several issues have arisen from M.U.L.'s late engagement of external auditors, and their not being able to be present for physical checks of assets, including counts of inventories, at each Balance Sheet date. However, there is also evidence that the Company's internal practices and processes are not adequately performing regular physical checks of all assets at all locations of the Company's operations. Additional issues arose from our review of the estimated useful lives of each type of asset, and the related periods and rates of depreciation. For example, the cost of the Power Station is being depreciated over 50 years. Other items in the Transmission and Distribution networks are being depreciated over periods of 15 to 25 years. However, the actual status of most of the Company's assets is visible wear and aging; several items are not working well or are out of use. The delays in maintenance and the overworking of some key assets (e.g., generators) well beyond their recommended optimal useful lives, further compound the deterioration of assets. Furthermore, external valuations have not been done for more than a decade. Therefore, in addition to the insurance-related risks, there are risks that the net book-values of assets are being overstated. We also found no evidence of appropriate provisions for obsolescence.

Recommendations

4.23 Review all prior legislative orders and decisions affecting M.U.L.'s revenues and collections. The Company, together with the MOFEM, the Attorney General's Chambers, and the Cabinet, should identify, review, and urgently update all prior Executive Council decisions, Cabinet Decisions, S.R.O.s, or other decisions/actions that are affecting M.U.L.'s revenues and

collections, including those related to [a] charges for Vacant Lots, [b] charges for Street Lights, and [c] rates of revenue for water and for electricity. Old decisions made during a period of crisis, such as the 1990s for instance, should be repealed or updated to reflect current realities, the Cabinet's Policy Agenda, the GOM's Sustainable Development Plan, and Montserrat's national priorities for the 21st Century (which include self-reliance, prudent financial management of all public-sector entities and State-owned companies, energy-security, climate-resilience, environmental safety, 100% renewable forms of energy, and replacing/eliminating fossil fuels, et cetera).

4.24 Boost collections of clients' unpaid bills and minimise new arrears of revenue. Every effort should be made to collect outstanding receivables (e.g., over $1 million owing for Vacant Lots). Then, on a targeted case-by-case basis, only where clearly necessary should old receivables be reduced or written off the Company's accounts if they are truly uncollectable. It is important to reflect the true collectable / realisable amounts in the financial statements.

4.25 Gradually adjust M.U.L.'s rates of revenue in line with current total costs. To return M.U.L. to its long history of profitability and self-reliance, the Board should advocate through the Financial Secretary/Minister/Cabinet for an urgent updating of the decades-old rates per unit charged to customers for water and for electricity services. This is the most important step in achieving M.U.L.'s viability and sustainability: it is impossible to be profitable so long as it continues to sell its products and services below their total costs. As with recent years' policy-adjustments to rescue and to boost the Montserrat Social Security Fund, this can be done in small increments and in phases to smoothen any impact on households and businesses. Furthermore, as noted in our previous Performance Audit of M.U.L. (year 2017), in periods that fuel-prices decline, some of the savings can be converted to rate-increases for M.U.L., while sharing the remaining savings with customers. This is essential as only rate-increases will improve M.U.L.'s overall revenues, cashflows, and profitability. Otherwise, fluctuations in fuel-prices are merely a pass-through cost-recovery (called Fuel Surcharge), and not a revenue to M.U.L. itself.

4.26 Illustrations: For instance, in the 12 months from August, 2022, to August, 2023, the Fuel Surcharge to domestic customers declined from E.C.$1.19 per kilowatt-hour to E.C.$0.59 per kilowatt-hour. Of this total fuel-cost saving of $0.60 per kilowatt-hour, if even 20% had been converted to improved revenue-rates for M.U.L., the price per kilowatt-hour for Block 2 consumption (i.e., customers using over 75 kwh per month) would have increased from 55 cents to 67 cents. This small adjustment at the level of the individual household would have had transformational effects at the national level, including restoring the Company to profitability. Meanwhile, customers would be enjoying the other 80% of the fuel-cost savings.

4.27 As another example, even if the Block-1 price had doubled from 48 cents to 96 cents, as of August, 2023, the total price per kilowatt-hour for domestic customers would still be lower [i.e., 96 cents basic tariff-rate plus Fuel Surcharge of $0.59 = $1.54 per kwh] than it was in August, 2022 [i.e., 48 cents basic tariff-rate plus Fuel Surcharge of $1.19 = $1.67 per kwh]. However, at the national level, the doubling of effective revenues would enable the Company [a] to end current losses, [b] to reverse all prior years' losses, and [c] to create the internal reserves to replace old assets in a timely way, as well as [d] to make the new investments urgently needed in equipment, in skills, in technology, and in infrastructure. Each 1-cent improvement in the rate of revenue for electricity-service is tiny at the level of individual customers, but translates into more than $100,000 per year reduction of losses for the Company. This directly reduces the need for large recurrent grants from the GOM to M.U.L. in the current status of persistent shortfalls in revenues versus the rising total costs required to deliver the utility-services consistently and well.

4.28 Complement consolidated reporting with Divisional reporting. For greater clarity for policy-makers, for the MOFEM, and for the public, the Company should present separate statements for each Division to complement the consolidated statements of its operations. This is consistent with the spirit and the disclosure requirements of International Financial Reporting Standards (I.F.R.S.), which require significant segments of an entity's business to be presented clearly and with sufficient separate details to allow readers to understand and to assess the performance of each segment. This would make clear the true net performance of the Electricity Division versus that of the Water & Sewage Division within M.U.L. When all the figures are combined as one entity in current practice, each Division's accounting, performance, and reporting are not clear for external stakeholders to understand and to assess. Given their different mandates, and given their separate portfolios of utility-services to administer, the including of unconsolidated financial reports and budgets will make comparisons with each Division's budgets and targets much easier to achieve, and will improve communication with all stakeholders. Enhanced calculation and analysis of variances, more accurate budgeting, more complete disclosure, and better monitoring and evaluation will be among the benefits from an integrated approach to budgeting, accounting, and reporting.

4.29 Perform regular physical checks of all assets. At least annually, the Company should physically inspect, document, and assess all of its assets. This requires site-visits to all of its locations, from Head Office to the Power Station to the warehouses to the pumping stations to the reservoirs and catchments/wells. For added assurance, such checks should be observed by independent persons (e.g., external auditors, Internal Audit Department, and/or Office of the Auditor-General). This will also address one of the recurring causes of past Qualified Audit Opinions on the Company's financial statements, and a major risk to future adverse audit-conclusions.

4.30 Review estimated useful lives and depreciation-rates for all assets. At least annually, the Company should reassess original estimates of useful lives and rates of depreciation for each category of asset. These estimates and assumptions should be revised conservatively in the light of evidence from repairs and maintenance history, physical checks, and current condition of assets at each Balance Sheet date. E.g., it might be more reasonable to depreciate buildings over 30 to 40 years rather than 50 years. E.g., it might be more prudent to depreciate generators and other types of high-use equipment over 10 years or less, given the actual patterns of usage, and given that some assets procured by or for M.U.L. were used/second-hand assets when they were acquired by the Company.

Part 2: Performance Management

Overview

4.31 Becoming self-reliant and self-sufficient again are two of the complementary key national outcomes highlighted in the SDP, as well as subsequent capital-works programmes such as the Capital Investment Programme for Resilient Economic Growth (CIPREG) programmes #1 and #2, funded by the FCDO, as part of Montserrat's national strategy for economic redevelopment following the volcanic crisis that began in July, 1995. The generation of local power and water, with increasing shifts to renewable sources, will help to sustain economic growth and a thriving private sector, and are essential to achieving the National Vision, the SDP, and the global Sustainable Development Goals by year 2030. Reliable, high-quality utilities (with capacity exceeding current demand) are important for creating, delivering, maintaining, and growing the primary public services (e.g., housing, education, utilities, and infrastructure). Such services are needed both for retention of the remaining population as well as for the repatriation of persons from the Diaspora, supplemented by a successful strategy for regional and global immigration of persons with needed capital and skills. Thus, MU.L.'s effective management of the GOM's policies and initiatives for utility-administration, and the impact of the Company's operations in developing the country's local public services and revenues, also directly contribute to the economy, to the business-environment, and to the society, helping to achieve various objectives stated in the Cabinet's Policy Agenda and in the SDP.

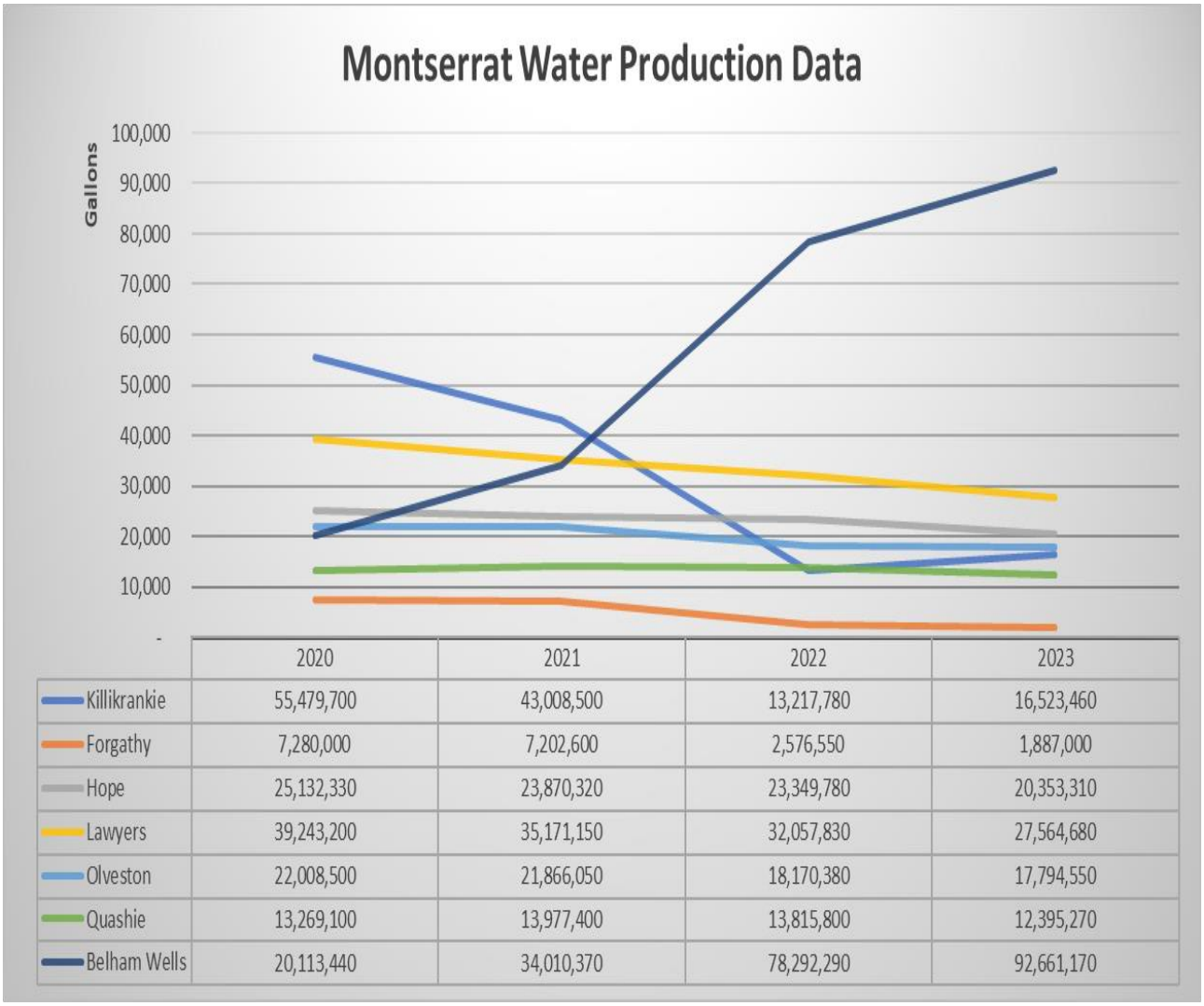
Findings of the Audit

4.32 **Montserrat has several untapped springs.** A total of 12 springs of fresh surface-water have been identified on the island, but only 6 of them are being tapped through the Company's catchments and reservoirs. This represents tremendous potential for further increases in the available water-supply for the island's residents. This can also support nearby export-markets.

4.33 **Huge losses of water through leaks and wastage.** At multiple points throughout the aging national infrastructure, water is being lost on a massive scale prior to reaching end-users, and much more is being lost or wasted at customers' premises. A recent report (September, 2023) identified that, over the years 2014 to 2023, there was a gap of more than 370 million gallons

between what was recorded at source (springs and catchments) and what was effectively delivered to end-users. As that did not include full-year data for year 2023, the total known losses for M.U.L. were closer to 400 million gallons over the past 10 years, or an average of 40 million gallons per year. The Company's data further showed that over 5,600 leaks were recorded during years 2016 to 2022, or an average of more than 800 per year. These figures do not include all of the leaks that occur beyond the end-points of the Company's main pipes: e.g., pipes on customers' premises, leaks within homes, leaks within businesses, leaks within public buildings, et cetera. This also represents a large loss of potential revenues for the Company, a waste of resources for the country, and missed economic value, including untapped exports.

4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells.



	2020	2021	2022	2023
Killikrankie	55,479,700	43,008,500	13,217,780	16,523,460
Forgathy	7,280,000	7,202,600	2,576,550	1,887,000
Hope	25,132,330	23,870,320	23,349,780	20,353,310
Lawyers	39,243,200	35,171,150	32,057,830	27,564,680
Olveston	22,008,500	21,866,050	18,170,380	17,794,550
Quashie	13,269,100	13,977,400	13,815,800	12,395,270
Belham Wells	20,113,440	34,010,370	78,292,290	92,661,170

Source: Water Division, Montserrat Utilities Limited.

4.35 Rising demand for bottled/drinking water and related beverages. As a consequence of the global climate-crisis, several other countries, including Caribbean and O.E.C.S. neighbours, are experiencing chronic water-shortages, prolonged droughts, salt-water intrusion into underground wells, and other disruptions of supply. Meanwhile, the regional and global demands for safe water generally, and for bottle drinking water especially, are rising annually. Global demand has continuously increased both because the world's population, overall, continues to grow, and because per-capita consumption has increased in line with rising average incomes and rising standards of living. Public-health risks to/from aged and deteriorating public infrastructure, actual or potential contamination of water-systems, heightened awareness of hygiene/sanitation (accelerated during and since the global COVID-19 pandemic, for instance), and an increasing health-consciousness/fitness-orientation among the population, are among the many factors that are further increasing the per-capita demands for bottled water and specialty beverages. Two of Montserrat's sources of competitive advantage are [a] its abundant year-round rainwater and [b] its large ratio of vegetated area to total land-area provides an excellent natural environment for sourcing, for producing, for harvesting, for storing, and for delivering much more water than it needs.

4.36 History of frequent interruptions of the electricity-service. In our prior performance-audit of the Company, there were repeated and prolonged periods without electricity, and many customers and businesses reported that they suffered (uncompensated) damage to appliances. There was widespread dissatisfaction with the recurring adverse impacts of blackouts on households, on businesses, and on public services. This study found that the same issues have recurred during the ensuing years (2018 to 2024): e.g., a major national crisis affecting every community on the island for two weeks in July, 2023, was reminiscent of the crisis of island-wide blackouts in March, 2017.

4.37 Current electricity crisis. The Electricity Division recorded 54 power outages on the island for the period January 01st, 2024, to July 31st, 2024. Contributing factors to previous and current crises include [a] not enough generators in reserve on the island to replace any in-service engines that malfunction or stop working; [b] procurement of used generators instead of buying only new generators; [c] use of high-speed generators, which are best suited to short-term/emergency situations, instead of medium-speed generators; [d] aged infrastructure leading to many faults and failures of equipment, of generators, and of multiple points throughout the distribution-networks; [e] overworked equipment and generators, owing to neglected/delayed maintenance; [f] equipment and generators used years beyond their optimal useful lives, owing to delays in asset-replacements; [g] gaps in the training of new employees and lags in the upskilling of junior workers; and [h] continued use of old technologies, parts, and approaches instead of more efficient and more effective up-to-date ones.

4.38 Delayed collections and enforcement lead to uncollectible revenue. The annual audits of the Company's accounts have pointed to unacceptably high levels of accounts in arrears, including aged amounts that reflect no activity or progress year after year. In the end, when years/decades pass without enforcement, large amounts of these old receivables have proven to be uncollectible, a further loss to M.U.L.'s/GOM's local revenues and the national quest for self-sufficiency. This means that, in addition to the key identified issues relating to insufficient revenues for the Company to cover all of its costs and expenses, there are risks relating to the timely collecting of the revenues that the Company has already earned.

4.39 Limited installed capacity for storage of water and of sewage. In our site-visits to springs and catchments, frontline workers from the Water Division identified a number of storage-tanks/reservoirs that were old; not all were in use. Both our previous study (year 2017) and this study reconfirmed that the capacity of installed water-tanks and sewage-tanks remains below satisfactory (storage equivalent to at least 3 to 5 days of usage) levels. In September, 2017, for instance, a 2-day interruption of electricity-service in the wake of a hurricane was followed by days of interruption of water-supply. Furthermore, the installed storage-capacity for water/sewage has not kept pace with the growth of population in areas such as Davy Hill and Look Out. The conditions of several of the in-use storage-tanks (both for water and for sewage) are deteriorating and various internal reports have highlighted the risks [1] of raw sewage leaking or overflowing and [2] of interruptions of water-supply to some communities.

4.40 Important progress achieved in solar energy, but the pace is too slow. Thanks to important public investments supported by external funding during the past decade, the transition to Green Energy is in progress: 1 MW of solar capacity was installed in two phases: 250 Kw at Brades and 750 Kw array at Look Out. Theoretically, this can supply up to 30% to 40% of the island's daily peak of demand for electricity. In practice, however, the Company's actual production of electricity from solar remains a small percentage of the total energy consumed on the island. For instance, the Owen Lewis report for M.U.L. (September, 2023) identified 5 generators with a combined capacity of more than 7 megawatts of power; this would put the solar capacity at only one eighth of the total energy-capacity of M.U.L. at that point in time. More pointedly, the Company's national data on electricity produced and consumed revealed that the percentage of electricity from solar energy was similarly small (less than 1/9 of the total electricity produced): e.g., for January to August, 2023, electricity from generators (fossil fuels) totalled 8,196,020 kwh versus 1,015,353 kwh from solar energy.

4.41 Limited battery-storage. An important part of the solar-energy strategy is to have batteries to store surpluses of energy during the daytime to support night-time uses of energy when solar production is not available. Battery-storage is also useful for balancing the peaks and the lows of production versus consumption/demand for energy from conventional diesel-operated generators. However, the island's installed --- and, most importantly, properly connected and operating --- battery-capacity remains very low. To date, it is far from being adequate to support the Montserrat Energy Policy's goal of 100% renewable energy by year 2030. Without effective and adequate battery-storage, surpluses of produced energy are lost. There is, correspondingly, a higher cost (and increased consumption of fossil fuels) to produce extra energy to meet peaks in demand entirely from production where there is little/no storage of energy to balance flows to and from the grid. Update: in October, 2024, M.U.L. confirmed that the solar Battery Energy-Storage System remained offline, having not contributed to the national grid for the past two years, owing to a fault in the Battery Management System.

4.42 No contribution from geothermal, wind, or other non-solar green sources. Available technologies offer a range of options for achieving Montserrat's goal of 100% renewable energy. The island's geology and topography offer excellent prospects for geothermal energy, for wind energy, for hydro-power, and for the harnessing of tidal energy, among other possibilities. For example, with the funding support of the DFID (now FCDO), MCWLE/GOM invested tens of millions of dollars in exploring the potential for geothermal energy during years 2012 to 2015. Three wells were dug: the third well collapsed and was abandoned, but the first two wells were successful in proving the availability of abundant geothermal energy for harvesting to produce electricity. However, our current study, as well as the previous study (year 2017), confirmed that no progress was achieved in connecting any of these sources of energy to the national grid, apart from solar energy.

4.43 Inadequate framework for private solar-arrays to supplement national grid. Over the years, a number of households and businesses on the island have voluntarily invested in solar water-heaters and in solar rooftop panels for electricity. However, there is not a satisfactory legislative and policy framework for explicitly encouraging consumers and businesses to invest in solar-energy. Neither is there a clear policy-framework to integrate consumers' and businesses' solar arrays with the national energy-grid. The green-energy incentives that we have identified, so far, related to the importation of electric vehicles and hybrid vehicles.

4.44 Few water-coolers and water-bottle refilling stations are at public venues. Despite the vital importance of water for healthy and sustainable lifestyles, we found that very few venues have functioning water-coolers, water-dispensers, or bottle-refilling stations on the island.

It is not clear that enough has been done to promote water as a much healthier choice than all of the manufactured liquids and imported beverages; what is certain is that consumers' choices are strongly shaped by infrastructure, by enforced policies, and by which products/options are actually provided and those that are readily available at little or no extra effort or cost. By contrast, we have found that non-water options and several imported beverages are routinely provided at in-house and public events, trainings, conferences, entertainment, functions, et cetera.

4.45 Table 4.2: Annual Trends of Rainfall in Montserrat: years 2003 to 2023

Year	Monthly Average (mm.)	Monthly High (mm.)	Monthly Low (mm.)
2003	**78.3**	271.4	13
2004	**152.8**	**506.5**	**62.1**
2005	**106.6**	237.4	44.2
2006	**143.6**	396.5	29.9
2007	**78.5**	206.2	17.2
2008	**129.0**	395.6	34.4
2009	**95.5**	281	30.5
2010	**169.6**	502.3	**3.8**
2011	**149.0**	290.8	18.7
2012	**106.3**	374.4	9.7
2013	**96.9**	154.7	10.5
2014	**105.4**	237.8	25.9
2015	**60.3**	**147.9**	**3.2**
2016	**117.3**	395.4	44.9
2017	**136.1**	326.4	19.4
2018	**100.3**	261.7	26.3
2019	**85.9**	185.4	24.7
2020	**106.5**	251.2	37.5
2021	**80.4**	199.1	31
2022	**79.7**	248.5	26.7
2023	**98.0**	316.8	26.8

Sources: John A. Osborne Airport's Meteorological Service — Montserrat Statistics Department

4.46 The local impact of the global climate-crisis: reduced rainfall. A combination of declining annual total rainfall and rising mean temperatures poses a threat to human health, to agriculture, and to infrastructure, including the maintenance and the delivery of national utility-services. Data from the Montserrat Statistics Department indicated a noticeable decline in the average monthly rainfall over the past 20 years. [See summary in Table 4.2 above.] There is also a wide range of seasonal variation in weather over the course of each year: [a] dry season --- e.g., only 3.8 mm. of rain in Feb., 2010 --- versus wet season --- e.g., 502.3 mm. in Aug., 2010; [b] hot, humid Summer months versus cooler Winter months.

4.47 However, the long-term trends in this century are clear and alarming: the annual/monthly peaks are becoming lower and annual/monthly lows are trending even lower. E.g. #1, The annual high of 149 mm. (per month) in the second decade (2011 to 2020) is 12% below that of the prior decade (2003 to 2010); the annual average of 106.4 (per month) for the second decade is 11% less than that of the prior decade. E.g. #2, The high of 98 mm. (per month) so far in this third decade (2021 to 2023) is 34% below that of the prior decade; the average of 86.04 mm. (per month) so far for this decade is 19% less than that of the prior decade. Reduced rainfall affects the amount and the speed of groundwater replenishment, without which aquifers will be depleted, and current sources, such as the Belham Wells, could become unavailable sooner than historically expected.

4.48 Table 4.1: Montserrat's Dry-Bulb Temperatures in degrees Celsius (monthly): years 2013 to 2023. (Excludes year 2020, owing to incomplete data.)

Month	2013	2014	2015	2016	2017	2018	2019	2021	2022	2023	2023 vs. 2013 (%)	10-year high vs. 2013
Jan.	24.9	24.9	25.3	25.1	25.1	25.2	24.3	**25.4**	25.2	24.9	0.00%	2.01%
Feb.	25.1	24.7	25.3	25.4	25.4	24.5	24.8	25.4	**25.8**	24.6	(1.99)	2.79%
March	25.4	25.4	**25.8**	25.2	25.5	25.5	25.3	25.4	25.5	25.5	0.39%	1.57%
April	25.5	25.8	25.9	**26.4**	25.9	26.1	25.8	26.1	25.7	26.3	3.14%	3.53%
May	26.5	26.0	27.1	27.4	26.9	26.2	26.2	27.1	26.9	**27.6**	4.15%	4.15%
June	26.9	27.4	27.3	27.1	27.4	27.2	27.4	27.5	27.8	**29.3**	8.92%	8.92%
July	27.4	27.3	27.5	27.6	27.7	27.2	28.2	28.3	27.8	**28.3**	3.28%	3.28%
Aug.	27.7	27.2	27.9	28.0	28.8	27.4	28.1	28.0	28.2	**28.9**	4.33%	4.33%
Sept.	28.1	27.5	27.9	28.1	27.6	27.6	28.3	28.4	28.1	**30.0**	6.76%	6.76%
Oct.	27.9	27.4	28.0	**28.4**	27.4	27.2	28.2	28.0	27.7	27.5	(1.43)	1.79%
Nov.	26.7	26.6	26.6	26.9	26.9	26.1	27.1	27.1	26.7	**27.6**	3.37%	3.37%
Dec.	25.5	25.4	25.7	26.0	26.0	25.4	**26.4**	26.0	25.5	26.3	3.14%	3.53%

Sources: John A. Osborne Airport's Meteorological Service; Montserrat Statistics Department.

4.49 The local impact of the global climate-crisis: rising temperatures. At the same time as average rainfall has been gradually declining, average temperatures have been gradually rising. Globally, year 2023 was the hottest year on record. For Montserrat likewise, in a point-to-point comparison, 10 months of year 2023 were, on average, hotter than the corresponding months of year 2013: e.g., June was 9% hotter and September was 7% hotter. As with blood-pressure readings in human health, so with temperature metrics: every higher point on the scale has

measurably more adverse impacts. More remarkably, half of the months in year 2023 were 10-or-more-years highs. (See Table 4.1 above.)

4.50 Operational implications of hotter climate. The higher the average temperature becomes, the more water is lost to evaporation, both at the surface/catchments and from storage/reservoirs; this would tend to reduce net delivered output per million gallons of sourced water-supply. Hotter temperatures also adversely affect the condition of above-ground infrastructure such as utility-poles and electricity-wires. These trends make it likely that traditional materials will no longer be adequate (e.g., asphalt is much more easily damaged by heat, than concrete is) and that maintenance costs will rise more quickly than in past decades. Another dimension of the climate-crisis is the impact on human health and productivity.

4.51 Public/employee health implications. Warmer temperatures increase the activities of harmful insects such as mosquitoes, leading to higher incidence of vector-borne viruses and illnesses (e.g., Dengue Fever, Zika, Chikungunya, malaria). These factors and trends have implications for employees' safety throughout the distribution-networks: from the maintenance of springs and catchments, to installations and repairs of water-pipes and transmission-lines, to delivery of services, responses to fault-reports by customers, and other aspects of daily operations. Higher outside temperatures also negatively affect productivity, health, and safety for frontline workers, requiring more frequent rest-breaks, more regular intake of water, more protective clothing, and more thoughtful scheduling and rostering of frontline teams away from hours of peak daytime heat.

Recommendations

4.52 Reduce leaks, and prevent new ones, throughout the water-infrastructure. The Company should review, document, and monitor procedures for detecting and promptly repairing leaks at catchments, in distribution-networks, and elsewhere on the island. It should strengthen its programme for preventative maintenance to minimise the likelihood of new leaks, of broken pipes, and of damage to reservoirs and catchments. Improved technologies such as sensors and drones can greatly improve the Company's ability to pinpoint the locations of existing leaks as well as points of weakness or high risk within the infrastructure. Smart uses of technologies can improve surveillance of, and access to, difficult-to-reach locations, and can also improve the safety of the Company's frontline workers, both in regular operations, and in times of emergencies (e.g., earthquakes, floods, storms, and hurricanes) and post-disaster assessments and recoveries.

4.53 Assess the opportunities for harvesting the untapped springs. To avoid the continued over-reliance on the Belham Wells, and to address the rapidly rising risks of depletion of ground-water reserves, the Company should explore the use of the other identified springs on the island. Rainwater-collection and harvesting of fresh surface-water should always be the first and second choices of water-supply. Whilst every household and business in Montserrat can contribute to rainwater-collection and conservation-methods, M.U.L. is best positioned to continue the central management of the nation's springs. The greater use of spring-water will allow underground reserves to remain for strategic use, including [a] enhanced national security and [b] temporary support in times of emergency, to alleviate interruptions of regular water-supplies (e.g., when parts of the distribution-network are damaged; deliberate turning off of supply during repairs/upgrades to the network), or when there are periods of repairs, maintenance or renovations at any of the existing tapped springs/catchments.

4.54 Seize the opportunities for exports to water-scarce neighbouring islands. By reducing leaks and wastage, and by developing and managing existing and new springs and wells, the Company can greatly increase both the realisable output from current production and distribution, and harness the large revenue-potential for surpluses of output to supply export-markets. Surpluses can supply both new on-island business-opportunities (e.g., bottled water for local residents; expanded capacity to supply visitors, day-trippers, yachts, cruise-ships, and long-stay tourists; economic (re-)growth per SDP Goal #1; population rebuilding per SDP Goal #5) and new exports. Inspiration can be taken from past successes: e.g., in the wake of the volcanic crisis, it is noteworthy that new opportunities arose and have been seized by local entrepreneurs: e.g., mining and exports of sand and aggregate materials for the construction industry. What began as a tragedy has led to Montserrat's current biggest export-earner, rising 200% in 8 years: from E.C.$5,638,001 in year 2014 to E.C.$16,619,863 in year 2022 (per data from the Montserrat Statistics Department).

4.55 Enhance outreach, education & engagement for households and businesses. The Company should develop and implement a strategic approach to public education: e.g., about utilities, health and safety aspects, procedures for reporting leaks or other faults, and methods of conserving water and electricity. Reducing waste will result in lower bills for customers and lower costs to the Company. More sustainable practices by businesses, by households, by public-service Ministries and Departments, and by farmers can achieve further reductions in overall national per-capita consumption of water (and energy, since water-pumps require energy). This will lead to better management of water-resources, while boosting the net available amounts for new uses, for new businesses, and for the long-term growth of exports/tourism, further contributing to sustainable economic growth (per Montserrat's SDP Goals #1, #2, and #3).

4.56 Introduce value-added products to boost revenues and profitability. The current decades-old business-model limits the Company to low profit-margins on, and bulk production and delivery of, electricity and piped water. However, as with most natural resources, bulk commodities have much lower value and profitability than value-added products from those same commodities. An obvious example, in line with the Cabinet's Policy Agenda and the objectives of the SDP, is to add nationally branded bottled drinking water to the Company's portfolio of products. The cost of locally sourced water is a fraction of the cost of importing foreign bottled water over long distances from outside the Caribbean, thus enabling M.U.L. to compete effectively with imported brands at a (much) lower cost to consumers. Various product-sizes and formats (e.g., individual 0.5-litre and 1-litre bottles versus 5-gallon and 10-gallon dispensers for events, schools, businesses, and workplaces) will serve a broader range of customers and types of use. Emphasising refillable, reusable, and recyclable containers, will further add to safe, healthy, and environmentally responsible consumption and production (per Montserrat's SDP Goals #1, #2, and #3, and towards national achievement of the global Sustainable Development Goals: e.g., S.D.G. #3 [Health], S.D.G. #6 [Clean water and sanitation], S.D.G. #11 [Sustainable cities and communities], S.D.G. #12 [Sustainable consumption and production], and S.D.G. #13 [Climate action]).

4.57 Illustration: This represents a win-win opportunity for the Company, for Montserrat, and for customers: [1] more local choices for the local market; [2] economic growth (both through increased local production and through reduced imports); [3] new jobs; [4] higher verifiable quality (e.g., M.U.L.'s water is regularly tested internally and externally, but not all imports are tested or have known quality); [5] much less ecological impact (e.g., long-distance shipping incurs much higher costs of fuel and much greater carbon-emissions; imported plastics are not being recycled and pose environmental risks and public-health hazards); [6] opportunities for local production and/or recycling of bottles (further reducing costs and imports); and [7] net savings to customers.

4.58 Moreover, the revenues and profits per litre of bottled water are large multiples of the price charged/revenue earned from bulk piped water. For example, the Company's current business-model charges an extremely low fixed minimum for domestic usage up to 1,000 gallons per month (e.g., E.C.$15 per month = 50 cents per day). However, that same volume of water could yield 4,000 litres of bottled water or 8,000 half-litres of bottled water or 16,000 quarter-litres of bottled water. In this example, at a price as low as E.C.$2 or E.C.$3 dollars per bottle, and with even 25 cents to E.C.$1.00 of gross profit per bottle, the Company would realise tens of thousands of dollars of revenues and thousands of dollars of net profits --- versus a fraction of a cent of revenue per gallon for bulk piped water. At the moment, all of these revenues and profits are going to foreign brands.

4.59 Repair/replace all old water-tanks and sewage tanks. The Company should urgently put in place a strategic programme of comprehensive repairs and maintenance for all

installed water-tanks/reservoirs and sewage-tanks. Furthermore, the Company should engage the support of the MCWLE, the MOFEM, and funding partners to achieve the timely replacement of all old storage-tanks when they reach the end of their optimal useful lives. This will contribute to continuity of utility-services as well as enhance safety of infrastructure and reduce/eliminate current risks to public health and to the environment.

4.60 Increase storage-capacity for water and sewage. The Company should urgently put in place a strategic programme for managing assets and infrastructure to ensure that, at the minimum, installed capacity keeps pace with, and, ideally, stays ahead of, residents' and businesses' needs in each part of the island. Furthermore, the Company should engage the support of the MCWLE, the MOFEM, and funding partners to invest in new storage capable of fully supporting the regrowth of the population, the regrowth of the economy, and all identified export-opportunities. Towards improving national resilience, the Company and partners should identify suitable means and locations for additional water-storage tanks within communities. This will provide on-site supplementary supplies at the local level whenever there are short-term interruptions of supplies from the national level of infrastructure (e.g., during periods of repair; emergencies; disasters). As a part of a whole-of-Government, whole-of-society strategy, the Company should work with the MCWLE, the MOFEM, and the Cabinet to encourage/incentivise households and businesses to install mosquito-proof water-tanks at the micro-level.

4.61 Increase the availability of water-coolers/dispensers & bottle-refilling stations. The Company should actively engage Ministries, Departments, organisations, workplaces, construction-sites, promoters of public events, businesses, and other stakeholders. In line with the United Nations' S.D.G. #3, and Montserrat's S.D.P. Goal #3, a key collective outcome is to ensure the widespread and consistent availability of drinking water, functioning water-coolers, water-dispensers, and well-maintained bottle-refilling stations at all workplaces, schools, festivals, events, and other public places. The intersections of national utilities, water-quality, water-supply, and public health involve multiple Ministries, Departments, and other stakeholders. This, in turn, requires a whole-of-Government integrated approach to health-promotion, public education, and the provision of easy access to safe water (and healthier foods and beverage options, generally). The GOM/public service can lead by example with demonstrated commitments to healthier choices, both for its employees and for its customers, including emphasis on the availability and promotion of drinking water, at all workplaces, in-house events, externally hosted events, entertainments, etc.

4.62 Increase the availability of electric/solar recharging stations/outlets. The Company should actively engage Ministries, Departments, organisations, promoters of public events, businesses, and other stakeholders to expand the island's network of electric recharging

stations for electric and hybrid vehicles, as well as mobile phones and other devices. This would represent a major step forward in integrating M.U.L.'s, MCWLE's, and other partners respective mandates and contributions towards the SDP, the S.D.G.s, and the Montserrat Energy Policy. Increased provision for, and ease of using, electric / hybrid vehicles will encourage more drivers to switch from fossil-fuel vehicles to electric / hybrid, further boosting the demand for safe, clean energy. Integrating solar power with local electricity-services at these points of access/service will further enhance resilience of infrastructure and public services by reducing (and ultimately eliminating) the need for imported fuels. This strategy will also boost revenues for the Company.

4.63 Greatly increase the contribution of solar energy to the national grid. To achieve the Montserrat Energy Policy and the 2030 Agenda for Sustainable Development, the Company, together with stakeholders such as the GOM, the FCDO, and other funding partners, must urgently accelerate the investment in green solutions for the island's energy-supply. While exploring the best ways of harnessing the country's untapped wind-power, tidal power, and geothermal sources, the Company and stakeholders should immediately build on the solid foundation of installed solar-arrays, and at least double the solar capacity.

4.64 Greatly increase and optimise battery-storage. To optimise both current and future investments in solar energy, and any other renewable sources of electricity, the Company must urgently activate and fully utilise the installed battery-storage capacity. Next, it must increase on-island energy-storage capacity to ensure that no surpluses are lost, and that there is added resilience island-wide from the integration of micro-grids. The greater the supply and storage of energy from solar-arrays, the greater will be the savings of fuel-costs, the reduction of greenhouse-gas emissions, and the lower will be the risks to energy-security and to national security.

4.65 Optimise the legal and regulatory framework to incorporate private grids. As a whole-of-Government and whole-of-society framework demands, the Company should collaborate with the GOM to address all gaps and deficiencies in current laws, regulations, and policies relating to renewable energy, energy-conservation, private solar-arrays, and other forms of contribution to the national grid by households and by businesses. Remove barriers to private-sector investment in renewable energy. Provide a comprehensive framework to incentivise individuals, households, and businesses to invest in solar water-heaters, solar-electricity, and other forms of renewable energy and energy-conservation. Explore public-private partnerships to accelerate the Company's/GOM's investments in renewable energy, thus boosting the local economy and expanding the role of the private sector in sustainability. These efforts will collectively contribute to the implementation of the Montserrat Energy Policy and the achievement of the SDP Goals #1, #2, and #3, as well as multiple global Sustainable Development Goals.

CHAPTER 5: AUDIT CONCLUSION

5.1 Overall, M.U.L. has a clear legislative framework and governance structure in place for its operations. However, in practice, we have noted several inefficiencies in operations, frequent turnover of employees, some prolonged vacancies, insufficient training of the junior employees, delays in repairs/replacement of old/malfunctioning assets, and a large backlog of infrastructural maintenance. Repeated crises with electricity-services reflect this. There are large and recurring financial gaps between [a] actual and budgeted revenues and expenses, [b] the actual revenues collected, and [c] the revenues required to cover the total costs of operations each year. Both actual and potential revenues have declined with the large loss of customers since the volcanic crisis of the late 1990s led to an exodus of roughly two thirds of the population. Meanwhile, cumulatively, millions of dollars of revenues have not been collected timely or at all, owing to factors such as net emigration, loss of properties in the Exclusion Zone, non-payments by some customers, and late payments by other customers.

5.2 In theory, M.U.L. is an independent, self-managed corporation. In practice, the Cabinet/GOM makes most of the key decisions affecting energy-policies, utilities, taxation, and prices for water and for electricity, including determining the types of services that M.U.L. provides, and sets the rates of fees that the Company administers. Thus, M.U.L. is unable to make certain decisions for itself that would allow the Company to achieve its full mandate while ensuring long-term profitability. It is long overdue that the Cabinet/Legislative Assembly approve adjustments to M.U.L.'s revenue-rates in line with the actual total operating costs to deliver these vital national services. Otherwise, charging prices below costs will doom the Company to perpetual losses and rising need for grants, loans, and other support.

5.3 M.U.L. must also improve its operational efficiencies and be more effective in revenue-collections. Improvements from paper-based operations, and more use of widely available electronic systems, payment-methods, and technologies, are vital for a smoother delivery of service to the public, and enhanced efficiency. Finally, M.U.L. must greatly accelerate its progress towards the Montserrat Energy Policy's goal of 100% renewable energy by year 2030. Overreliance on imported fuels, diesel-run generators, and other equipment and vehicles that use fossil-fuels, creates financial pressures, uncertainty, and risks to the environment, to workers, to public health, and to Montserrat's society and economy. Doubling the solar capacity can solve all these problems.

CHAPTER 6: MANAGEMENT RESPONSE

Audit Recommendations & Follow-up Actions
Re: Performance Review of Montserrat Utilities Limited
September, 2024

APPENDIX 1: AUDIT FIELDWORK

Findings	***Recommendations***	***Management Response***	***Actions Undertaken To Date & Responsibility***	***Date of Planned Implementation***
	Chapter 2: Governance			
2.11 Little/no rotation of external auditors. 2.8 External financial audits were done, but remained in years-long backlog**.** 4.10 The administrative expenses continued to rise rapidly. 4.22 Insufficient verification of assets; doubtful valuations.	**2.15 Review the selection & rotation of auditors.** The Board should review the process and the criteria for the selection of external (financial) auditors. The policy and practices related to the rotation of audit-firms and audit-partners/directors should be reviewed and updated in line with best practices, regulatory requirements, and international standards. See examples in [3] of Appendix 2.	*2.11 We acknowledge the failure in the rotation of external auditors and will establish a review process to select and rotate auditors based on international standards.* *2.8 We are committed to resolving the backlog of audits and ensuring timely financial reporting.* *4.10 We will implement stricter controls to monitor administrative expenses and look for cost-saving opportunities.*	*2.11 The Board has instructed that open procurement of a qualified Audit Firm adhering to the international Audit standard will be practice going forward.* *2.8 The Finance Department is actively working to clear the backlog of audits. The Board will provide direct Oversight.* *4.10 The Financial Controller is leading the review of administrative expenses.* *4.22 The Asset Management team is being strengthened to improve*	*2.11 By December 2024* *2.8 By March 2025* *4.10 By April 2025* *4.22 By January 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
		4.22 We will enhance asset verification procedures to ensure accurate valuations.	*verification processes.*	
2.10 Lags in completing M.U.L.'s financial statements & external audits 2.8 External financial audits were done, but remained in years-long backlog**.** 2.9 Qualified audit-reports. **2.12** Records are kept, but rely heavily on paper and are not always up to date**.** **3.22** Updates (mid-2024) re M.U.L.'s website; limitations observed**.** **4.15** Balance Sheets showed a long-term trend of satisfactory Quick Ratios. **4.16** Large financial losses with the C.L.I.C.O. group. **4.17** Pension-liabilities have gradually declined, but remain large. **4.20** Current receivables (unpaid bills) from customers kept rising in recent years.	**2.16 Improve the timeliness and quality of financial reporting.** The Company should bring its accounting, reconciliations, and reporting, up to date monthly. The Company should aim to publish annual Financial Statements within 2 to 3 months of each fiscal year-end, given that best practices call for quarterly reporting within 15 days of the end of each fiscal quarter, and within 45 days of each fiscal year-end. With each set of financial statements (whether they be audited or unaudited), the Company's Board and Management should issue	*Recommendation is noted and agreed.* *2.10 We will accelerate the implementation of our online functionality to enhance service delivery and efficiency.*	*MUL has recently hired a qualified Accountant in December 2024 to assist with the regular and reliable production of Financial information* *The Managing Director and the Financial Controller with oversight from the Board will be responsible.* *2.10 The IT Department is responsible for the transition to online functionalities.*	*December 2024* *2.10 by July 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.22 Insufficient verification of assets; doubtful valuations. **4.34** Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.49** The local impact of the global climate-crisis: rising temperatures. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	annual reports and discussions of the Company's achievements, challenges, plans, and performance. These are essential to inform the Board, the MCWLE, the MOFEM, other stakeholders, and the public, as well as to increase oversight of nationally important entities and public services, as well as contributing to the boosting of confidence in governance of public institutions and State-owned companies. **Key Enhancements Required:** **The Company should incorporate:** **[a] strategic planning for,** **[b] risk-assessment and risk-management frameworks relating to,** **[c] accounting for, and reporting of,** **matters of sustainability, including** **[i] the effects of the climate-crisis,**	*Recommendation is noted.*		

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	[ii] environmental management, and **[iii] corporate social responsibility.**			
2.8 External financial audits were done, but remained in years-long backlog**.** 2.9 Qualified audit-reports. 2.10 Lags in completing M.U.L.'s financial statements & external audits. 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.**	**2.17 Improve the timeliness of audits and publication of audited statements.** Greater efforts should be made to plan and to co-ordinate annual financial audits to achieve publication within 3 to 6 months of each fiscal year-end, rather than years later. For each financial year, the Company should agree auditing contracts with the auditors in good time for them to be present for the verification of physical assets, including observations of accurate counts of inventories. The Company should also consider establishing an Internal Audit Unit to provide greater assurance over internal processes, accounting, and reporting, as well as identifying opportunities to improve risk-management and various	*Recommendation noted and agreed. MUL has committed to resolving the backlog of audits and ensuring timely financial reporting. Other aspects of the recommendation including the Internal Audit function will require time and resources to implement but will be considered by the Board.*	*The Finance Department is currently working with the external auditors on backlog audits. There is still audits to be completed but with the onboarding of the new Accountant more concerted efforts are in place clear the backlog of audits.* *The Board will provide direct Oversight to ensure MUL Audit Accountants are up to date.*	*December 2024*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	aspects of the Company's operations. Timely monthly internal accounting and reconciliations will also enable interim audits, review of high-value and higher-risk accounts/transactions, and tests of controls prior to the end of each fiscal year, reducing the auditing work to be done (and the overall cost of audits) at and after each fiscal year-end. The Company's website should be promptly updated with annual reports and audited financial statements each year.			
2.3 Meetings of the Board are held, but less frequently than optimal. 2.4 Reduced / Inadequate oversight at M.U.L. 2.9 Qualified audit-reports. 2.10 Lags in completing M.U.L.'s financial statements & external audits. 2.12 Records are kept, but rely heavily on paper and are not always up to date**.** 2.13 Internal meetings are held irregularly, and they are not	**2.18 Improve & document engagement and oversight within the Company.** In line with best practice, the frequency of the Board's meetings, Committees' meetings, Managers' meetings, and the staff-meetings should be not less than monthly.	*2.18 Recommendations is noted and agreed.*	*The Board has committed to a more regular schedule of meetings and has ensured that Minutes are documented and reviewed. The Managing Director will be responsible for ensuring the same at the Management level.*	*November 2024*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
adequately documented. 4.10 The administrative expenses continued to rise rapidly. 4.12 Conservative approach to cash-management. 4.16 Large financial losses with the C.L.I.C.O. group. 4.17 Pension-liabilities have gradually declined, but remain large. 4.19 Outdated receivables from customers, plus current amounts, are large. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. 4.22 Insufficient verification of assets; doubtful valuations. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. 4.36 History of frequent interruptions of the electricity-service**.**	All such meetings should be planned and documented including: [a] date, [b] time started and time ended, [c] place, [d] participants, [e] topics discussed, [f] decisions made, [g] review of progress against prior meetings' action-items, and [h] details of new tasks assigned, [i] to whom, and [j] with deliverables [k] by which dates. There is need for more regular attention and oversight by the MCWLE and the MOFEM to hold the	*Recommendation noted and agreed.*	*The Ministry of Finance has direct oversight of the financial performance on MUL with the appoint of the Financial Secretary as the Chair. The Permanent Secretary of BUILT also sits on*	*December 2023-Ongoing*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.37 Current electricity crisis. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43** Inadequate framework for private solar-arrays to supplement national grid. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	Company accountable for budgets, for timely and useful reporting, and for the closing of gaps in progress towards objectives, targets, and Key Performance Indicators. Strategic plans and budgets should be regularly reviewed and updated before the periods that they cover expire. Review the performance of the Company and each of its teams, Units, and sub-committees at least annually, including attendance, participation, outputs, outcomes, and lags in decision-making.		*the Board. Further interventions are planned to ensure proper oversight is in provided.*	
2.3 Meetings of the Board are held, but less frequently than optimal. 2.4 Reduced / Inadequate oversight at M.U.L. 3.10 Risks of major systemic failures are high and rising yearly. 4.10 The administrative expenses continued to rise rapidly.	**2.19 Review and assess each Committee / Board.** The Company, the MCWLE, and the MOFEM should individually and collectively review and improve each of the processes whereby candidates are nominated, selected, and inducted into Committees/Boards.	*Recommendations is noted and agreed*	*MOFEM/BUILT/Board of MUL* *No action to date but will be considered for future.*	*July 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.12 Conservative approach to cash-management. 4.16 Large financial losses with the C.L.I.C.O. group. 4.17 Pension-liabilities have gradually declined, but remain large. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. 4.22 Insufficient verification of assets; doubtful valuations. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. 4.36 History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.40** Important progress achieved in solar energy, but the pace is too slow.	It is then essential to good governance to ensure that every Committee/Board has clear mandates, benchmarks, targets, regular meetings, satisfactory attendance, satisfactory records, and documented outputs. It is also important to have regular quarterly reports to the relevant Ministry/Cabinet and annual reports to the public to ensure accountability and transparency at all levels. To achieve value for money, the MOFEM should urgently reassess the existing model of paying members regardless of whether they have meetings, or attend meetings, or meet statutory obligations and best practices, including complete and timely record-keeping, secure document-storage, and all reporting requirements. It should then advise the Cabinet accordingly: e.g., whether to revise the terms of reference; e.g., whether and how to improve the existing model of appointments and remuneration;			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.41 Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43** Inadequate framework for private solar-arrays to supplement national grid. **4.46** The local impact of the global climate-crisis: reduced rainfall. **4.49** The local impact of the global climate-crisis: rising temperatures. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	or whether to adopt an alternate 21st-century model focused on rewards for results achieved, quality of outcomes, client-satisfaction indices, and value added. **An important aspect of governance is a robust framework for identifying, measuring, and managing risks. The Board and each Committee should implement appropriate metrics and dashboards to track key variables: e.g., those relating to [a] financial management, [b] environmental management, [c] sustainability, [d] supply-chains, [e] logistics, [f] social impacts, [g] economic trends, [h] the political environment, [i] compliance with relevant laws, regulations, and standards, [j] I.T. issues and opportunities, and [k] emerging trends, risks, and issues.**			
	Chapter 3: Efficiency			
3.5 The Company has not explicitly linked all of its objectives to the Policy Agenda / S.D.P. / S.D.G.s**.**	**3.23 Fully Integrate M.U.L.'s objectives with the Policy Agenda / S.D.P. / S.D.G.s.**	*Recommendation Noted.*	*Will be discussed at Board level*	*April 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
3.10 Risks of major systemic failures are high and rising yearly. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. **4.37** Current electricity crisis. **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43** Inadequate framework for private solar-arrays to supplement national grid. **4.46** The local impact of the global climate-crisis: reduced rainfall. **4.50** Operational implications of hotter climate**.**	Ensure that the objectives for the Company are clearly defined, measured, and assessed each year, and that each of them is more explicitly linked to the Cabinet's Policy Agenda. Further links to the national SDP and to the relevant global SDGs should be made also, along with specific actions to achieve both sets of goals/targets. This will contribute to the three intertwined objectives of: [a] policy-coherence between Departments/Ministries, [b] vertical integration across all levels of the GOM, and [c] a whole-of-Government approach to the national objectives and outcomes, including measurable progress towards the 2030 Agenda.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.51 Public / employee health implications**.**				
3.5 The Company has not explicitly linked all of its objectives to the Policy Agenda / SDP / SDGs. 4.10 The administrative expenses continued to rise rapidly. **4.43** Inadequate framework for private solar-arrays to supplement national grid.	**3.24 Clarify objectives and KPIs.** Review each objective for greater clarity and in practical terms. Ensure that every objective for the Company and for the MCWLE has KPIs and that all KPIs clearly support objectives. The Company and the related Departments/stakeholders should align and coordinate their strategic plans, objectives, KPIs, and targets.	*Recommendation Noted.*	*Will be discussed at Board level.*	*April 2025*
3.5 The Company has not explicitly linked all of its objectives to the Policy Agenda / SDP / SDGs**.** **3.10** Risks of major systemic failures are high and rising yearly. **4.10** The administrative expenses continued to rise rapidly. **4.14** Balance Sheets had a trend of strong and improving Current Assets / Ratios. **4.15** Balance Sheets showed a long-term trend of satisfactory Quick Ratios. **4.19** Outdated receivables from	**3.25 Review and improve the KPIs over time**. At least annually, the Company, the MCWLE, and the MOFEM should review and assess the KPIs to make them clearer, more measurable, more relevant to objectives, and focused more on strategic outcomes.	*Recommendation Noted.*	*Will be discussed at Board level*	*April 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
customers, plus current amounts, are large. **4.20** Current receivables (unpaid bills) from customers kept rising in recent years. **4.22** Insufficient verification of assets; doubtful valuations. **4.33** Huge losses of water through leaks and wastage. **4.34** Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.46** The local impact of the global climate-crisis: reduced rainfall.	Add new KPIs where the environment fundamentally changes: e.g., [a] new technologies; [b] COVID-19 or other pandemics; [c] new public-health regulations; [d] emerging social/economic/business trends and niches; [e] changing demographics; [f] climatic changes and local impacts).			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.50 Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**				
3.5 The Company has not explicitly linked all of its objectives to the Policy Agenda / SDP / SDGs**.** 3.9 Insufficient funding and delays of maintenance / renovations. 3.10 Risks of major systemic failures are high and rising yearly. 3.11 Aging / malfunctioning generators. 3.12 Difficulty in attracting and retaining talent. 3.19 Customers have strong interest in online payments and electronic channels**.** 3.20 Table 3.1: Customers' Transactions by Type of Payment (years 2015 to 2022) 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.**	**3.26 Set, review, and upgrade standards of service.** The Company should set and review standards for service in each Division and in each part of its operations, aiming to achieve consistent achievement in practice, and then proactively raising standards over time. Develop and report measures that are client-centric, including standards of service for such key areas as: (1) average timeframes for responding to queries/messages (e.g., by telephone, by mail, and by electronic mail), (2) average timeframes for processing requests for new accounts, for new connections, and for reconnections,	*Recommendation Noted.*	*Will be discussed at Board level*	***April 2026***

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.36 History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.41** Limited battery-storage**.** **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	(3) number of households/public buildings/businesses visited each Quarter/year, (4) number of public-education initiatives and, more importantly, their participation, impact, and outcomes, (5) measures of client-satisfaction, (6) measures of employees' satisfaction, and (7) numbers of disputes / complaints / objections (both new and brought forward), as well as (8) average timeframes for resolution, and (9) indicators of satisfactory outcomes (e.g., cases litigated versus cases resolved without litigation; successful cases versus those not completed versus those awarded in favour of the customer/other stakeholders).			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
2.9 Qualified audit-reports. 2.10 Lags in completing M.U.L.'s financial statements & external audits. 2.12 Records are kept, but rely heavily on paper and are not always up to date**.** **3.5** The Company has not explicitly linked all of its objectives to the Policy Agenda / SDP / SDGs**.** **3.12** Difficulty in attracting and retaining talent. 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.** 4.10 The administrative expenses continued to rise rapidly. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.**	**3.27 Improve the scope and timeliness of reporting of performance.** The Company, along with the MCWLE and MOFEM, should regularly measure, monitor, assess, and report its actual performance and progress against all of the relevant objectives and KPIs, the SDP, the S.D.G.s, the Policy Agenda, and the Montserrat Energy Policy, including public Annual Reports. The Quarterly Reports, for instance, should be complete and timely. Annual reports should be published within 3 months of the end of each fiscal year. Go beyond mandatory/statutory reporting (e.g., to the Legislative Assembly) to include broader accountability and transparency to the public. Encourage and enable active participation of stakeholders	*Recommendation Noted.*	*Will be discussed at Board level and the Ministry of Finance and BUILT in regards to requirements and alignment as much as feasible.*	***Aprill 2025***

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.50 Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	in understanding, reviewing, and assessing performance. This would help to build trust in public institutions and more confidence about the governance of taxpayers' dollars. It will also contribute to effective and timely national statistics, compilation of Voluntary National Reviews, and better interfaces with partners within the O.E.C.S., within the CARICOM, and within the U.K. and British Overseas Territories, as well as regional and international tax-bodies, multilateral agencies, donors, authorities, and regulators.			
2.12 Records are kept, but rely heavily on paper and are not always up to date**.** 2.13 Internal meetings are held irregularly, and they are not adequately documented. 3.12 Difficulty in attracting and retaining talent. 3.19 Customers have strong interest in online payments and electronic channels**.**	**3.28 Broaden the scope for feedback from the public / stakeholders and communicate through multiple channels.** The Company should periodically seek, document, and report on feedback on its services and encourage inputs from employees, from customers, and from other stakeholders: e.g., through annual surveys. Beyond the option of a regular radio programme both for public education and	*Recommendation Noted.*	*Will be discussed at Board level*	***April 2025***

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
3.20 Table 3.1: Customers' Transactions by Type of Payment (years 2015 to 2022) 3.21 Low public profile; Little / no use of online presence, payments, and social media. 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. **4.38** Delayed collections and enforcement lead to uncollectible revenue.	outreach, the Company and other key stakeholders should collaborate in reaching and engaging: [a] individual clients, [b] current and potential commercial clients, [c] patrons, [d] promotors, [e] sponsors, [f] hospitality providers, [g] accommodation providers, and [h] other categories of business stakeholders, using a range of available channels: e.g., websites, social media, telephone, mobile marketing, email, radio, news-broadcasts, audio, video, and other media. It is important to have targeted communication for			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	each category of stakeholder, and to address the specific needs, concerns, and issues related to different types of customer (e.g., households versus small businesses versus industrial clients versus public-sector entities).			
2.12 Records are kept, but rely heavily on paper and are not always up to date**.** 2.13 Internal meetings are held irregularly, and they are not adequately documented. 3.17 Meter-readings continue to be done manually and are subject to several risks. 3.19 Customers have strong interest in online payments and electronic channels**.** 3.20 Table 3.1: Customers' Transactions by Type of Payment (years 2015 to 2022) 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s	**3.29 Enable full electronic reporting, payments, and online accounts.** In line with the capabilities of e-Government, the goals of: [a] the Montserrat Information & Communications Technology Policy, and [b] the rights of taxpayers in the Income and Corporation Tax Act, as well as [c] the Electronic Transactions Act, the Company should complete the journey towards full online functionality of its website and systems, as soon as possible. Enable clients to submit payments and queries online and via email, including online/electronic submission of all documents and forms. This would greatly reduce the time and effort consumed by	*Recommendation is noted.*	*This requires review of the current systems capacity and a full fleshed out and costed proposal for the Board's consideration. Other significant priorities may take precedence in the immediate future. The Managing Director with Board Oversight will be responsible for taking this initiative forward at appropriate time.*	***To be determined/ no early than 2026-27***

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
website; limitations observed**.** 4.10 The administrative expenses continued to rise rapidly. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	the Company's staff in receiving, handling, sorting, storing, and scanning of clients' physical documents. It will also give clients much more convenience and ease in timely bill-payments, both on the island and from wherever in the world they happen to be, as many clients travel overseas, reside overseas full-time, or split their periods of residence across more than one country. Convert all forms to fully editable and configurable electronic/online formats, eliminating the need for printing, for manual filling, and for in-person delivery/submissions. Enable online payments, payment by credit-cards, and payment by debit-cards, thus widening the range of options available to clients, and thereby boosting collections, and improving compliance. Such diversity of payment-options and convenience could also prevent new arrears, improve collections of existing arrears, and better serve overseas clients.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
3.10 Risks of major systemic failures are high and rising yearly. 3.13 No insurance for several major assets/infrastructure. 3.14 Limited insurance for major assets: not all risks are covered. 3.15 Under-insurance for major assets: current values versus historical values. 3.16 Illustration of under-insured risks 4.22 Insufficient verification of assets; doubtful valuations. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis.	**3.30 Review and update all insurance-policies; self-insurance.** The Board should oversee a comprehensive review of all long-term assets and insured risks of the Company. Insured values should be updated to reflect the current replacement-values of assets insured. Furthermore, the Board, together with the MCWLE and the MOFEM, should establish the full extent of non-insured risks/assets, under-insured risks/assets, and the ultimate contingent liabilities facing the GOM and Montserrat. These facts should then feed into strategic discussions with key stakeholders, including the FCDO, to develop national resilience, self-insurance, and reserve-funds to reduce the gaps identified between values at risk and values effectively insured with third parties.	*Recommendation is noted and accepted.*	*This will require a comprehensive piece of work and updated audited financial statements. It will be the responsibility of the Financial Controller and Managing Director with the Board providing oversight.*	*2026*
3.7 Dangers and poor conditions of the access-pathways to springs and catchments**.**	**3.31 Urgently upgrade, and maintain safe access to, all springs and catchments.** The Company, along with partners such as the MCWLE where necessary, should	*Recommendation noted and agreed.*	*Working is ongoing with funding through the Government of Montserrat and the UK government to rehabilitate the various spring across*	*August 2024*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
3.9 Insufficient funding and delays of maintenance / renovations. 3.10 Risks of major systemic failures are high and rising yearly. 3.11 Aging / malfunctioning generators. 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.13 Low levels of debt; low cost of debt. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. **4.46** The local impact of the global climate-crisis: reduced rainfall.	urgently widen and secure all routes and footpaths to the 6 springs and catchments that are in use for the national water-supply. These routes and footpaths must be made large enough to facilitate both pedestrian access and the required transportation of tools, equipment, machinery, and materials to and from these vitally important sites. This strategy would, first of all, address and minimise risks to the health & safety of frontline workers and first responders. Secondly, better maintenance of safer and wider access-pathways would also enable much easier maintenance of the springs and the catchments themselves. Thirdly, improved access would allow for effective and timely responses to emergencies, accidents and injuries, and post-disaster surveillance and recovery operations. Fourthly, plan and implement more frequent cleaning, repairing, and de-bushing of pathways and catchments, clearance of vegetation in and		*the island. The Managing Director along with Ministry of BUILT and MoFEM have overall responsibility for the implementation.*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.50 Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	around catchments, and removal of debris, trees, and roots within catchments and adjacent to their perimeters. Preventative maintenance can greatly reduce the environmental hazards to people and to infrastructure, while helping to save on the long-term costs of current and future damage to springs, to catchments, to water-pipes, to access-paths, and to reservoirs. Better securing of catchments and springs would prevent intrusion by unauthorised persons as well as limit risks of damage and contamination from animals, from plants, and from trees.			
2.12 Records are kept, but rely heavily on paper and are not always up to date**.** 2.13 Internal meetings are held irregularly, and they are not adequately documented. 3.17 Meter-readings continue to be done manually and are subject to several risks. 3.19 Customers have strong interest in	**3.32 Reap the large cost-savings and benefits of minimising paper and postal mail.** The widely available electronic channels could be used immediately and with little or no net extra time, costs, or effort. (E.g., for communication with customers, for issuing information to the public,	*Recommendation Noted.*	*Will be discussed at Board level*	*April 2025*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
online payments and electronic channels**.** 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.** 4.10 The administrative expenses continued to rise rapidly. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	for internal document-handling, for customers' e-submission of forms, and for online banking for bill-payments.) Indeed, they would provide major opportunities for cost-savings to the Company, to businesses, and to consumers. A WhatsApp telephone call, a Zoom meeting, and e-mail cost zero, for example, but allow for immediate and convenient communication with customers, including those who are overseas, or who are not available during the Head Office's/cashiers' limited work-hours. The Company and other public entities could greatly reduce the time, the cost, the space, and the effort required for paper, stationery, postage, printing, energy, physical delivery, & physical storage. Electronic formats and storage have additional benefits such as avoiding the deterioration of physical records and the health-risks to employees from dust, mould, insects, and other issues relating to large			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	accumulations of old documents.			
	Chapter 4: Effectiveness: Part 1: Financial Management			
3.19 Customers have strong interest in online payments and electronic channels**.** 4.6 Negative bottom line: Long-term trend of net losses**.** 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.10 The administrative expenses continued to rise rapidly. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.20 Current receivables (unpaid bills) from customers	**4.23 Review all prior legislative orders and decisions affecting M.U.L.'s revenues and collections**. The Company, together with the MOFEM, the Attorney General's Chambers, and the Cabinet, should identify, review, and urgently update all prior Executive Council decisions, Cabinet Decisions, S.R.O.s, or other decisions/actions that are affecting M.U.L.'s revenues and collections, including those related to: [a] charges for Vacant Lots, [b] charges for Street Lights, and [c] rates of revenue for water and for electricity. Old decisions made during a period of crisis, such as the 1990s for instance, should be	*Recommendation is noted.*	*This requires Cabinet and Legislative intervention which is outside the remit of MUL. MUL will provide any support/information that is required*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
kept rising in recent years. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.** **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43 Inadequate framework for private solar-arrays to supplement national grid.**	repealed or updated to reflect: [a] current realities, [b] the Cabinet's Policy Agenda, [c] the GOM's Sustainable Development Plan, and [d] Montserrat's national priorities for the 21st Century (which include: [i] self-reliance, [ii] prudent financial management of all public-sector entities and State-owned companies, [iii] energy-security, [iv] climate-resilience, [v] environmental safety, [vi] 100% renewable forms of energy, and replacing/eliminating fossil fuels, et cetera).			
3.19 Customers have strong interest in online payments and electronic channels**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.**	**4.24 Boost collections of clients' unpaid bills and minimise new arrears of revenue.**	*Recommendation is noted and accepted.*	*Work has already been carried out to encourage Clients to pay down arrears. MUL has tightened its disconnection programme. The Managing Director is responsible for the*	*Ongoing*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.10 The administrative expenses continued to rise rapidly. 4.19 Outdated receivables from customers, plus current amounts, are large. 4.20 Current receivables (unpaid bills) from customers kept rising in recent years. **4.38** Delayed collections and enforcement lead to uncollectible revenue**.**	Every effort should be made to collect outstanding receivables (e.g., over $1 million owing for Vacant Lots). Then, on a targeted case-by-case basis, only where clearly necessary should old receivables be reduced or written off the Company's accounts if they are truly uncollectable. It is important to reflect the true collectable / realisable amounts in the financial statements.		*management of the Programme*	
4.6 Negative bottom line: Long-term trend of net losses**.** 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs.	**4.25 Gradually adjust M.U.L.'s rates of revenue in line with current total costs.** To return M.U.L. to its long history of profitability and self-reliance, the Board should advocate through the Financial Secretary/Minister/Cabinet for an urgent updating of the decades-old rates per unit charged to customers for water and for electricity services.	*Recommendation is noted.*	*This requires Cabinet and Legislative intervention which is outside the remit of MUL. MUL will provide any support/information that is required*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.10 The administrative expenses continued to rise rapidly. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.17 Pension-liabilities have gradually declined, but remain large. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.41** Limited battery-storage**.**	This is the most important step in achieving M.U.L.'s viability and sustainability: it is impossible to be profitable so long as it continues to sell its products and services below their total costs. As with recent years' policy-adjustments to rescue and to boost the Montserrat Social Security Fund, this can be done in small increments and in phases to smoothen any impact on households and businesses. Furthermore, as noted in our previous Performance Audit of M.U.L. (year 2017), in periods that fuel-prices decline, some of the savings can be converted to rate-increases for M.U.L., while sharing the remaining savings with customers. This is essential as only rate-increases will improve M.U.L.'s overall revenues, cashflows, and profitability. Otherwise, fluctuations in fuel-prices are merely a pass-through cost-recovery (called Fuel Surcharge), and not a revenue to M.U.L. itself.			
4.7 Water-rates and electricity-prices remain unchanged for	**4.26 Illustrations:**			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.10 The administrative expenses continued to rise rapidly. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills.	For instance, in the 12 months from August, 2022, to August, 2023, the Fuel Surcharge to domestic customers declined from E.C.$1.19 per kilowatt-hour to E.C.$0.59 per kilowatt-hour. Of this total fuel-cost saving of $0.60 per kilowatt-hour, if even 20% had been converted to improved revenue-rates for M.U.L., the price per kilowatt-hour for Block 2 consumption (i.e., customers using over 75 kwh per month) would have increased from 55 cents to 67 cents. This small adjustment at the level of the individual household would have had transformational effects at the national level, including restoring the Company to profitability. Meanwhile, customers would be enjoying the other 80% of the fuel-cost savings.			
4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly	**4.27** As another example, even if the Block-1 price had doubled from 48 cents to 96 cents, as of August, 2023, the <u>total</u> price per kilowatt-hour for domestic customers would still be lower [i.e., 96 cents basic tariff-rate plus Fuel Surcharge of $0.59 = $1.54 per kwh] than it was in			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
raise their rates to cover costs. 4.10 The administrative expenses continued to rise rapidly. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis.	August, 2022 [i.e., 48 cents basic tariff-rate plus Fuel Surcharge of $1.19 = $1.67 per kwh]. However, at the national level, the doubling of effective revenues would enable the Company: [a] to end current losses, [b] to reverse all prior years' losses, and [c] to create the internal reserves to replace old assets in a timely way, as well as [d] to make the new investments urgently needed in equipment, in skills, in technology, and in infrastructure. Each 1-cent improvement in the rate of revenue for electricity-service is tiny at the level of individual customers, but translates into more than $100,000 per year reduction of losses for the Company. This directly reduces the need for large recurrent grants from the GOM to M.U.L. in the current status of persistent shortfalls in revenues versus the rising total costs required to deliver			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	the utility-services consistently and well.			
3.19 Customers have strong interest in online payments and electronic channels**.** 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.** 4.10 The administrative expenses continued to rise rapidly. 4.17 Pension-liabilities have gradually declined, but remain large. 4.18 Stand-alone performance is difficult to assess against a consolidated budget. 4.22 Insufficient verification of assets; doubtful valuations. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of	**4.28 Complement consolidated reporting with Divisional reporting.** For greater clarity for policy-makers, for the MOFEM, and for the public, the Company should present separate statements for each Division to complement the consolidated statements of its operations. This is consistent with the spirit and the disclosure requirements of International Financial Reporting Standards (I.F.R.S.), which require significant segments of an entity's business to be presented clearly and with sufficient separate details to allow readers to understand and to assess the performance of each segment. This would make clear the true net performance of the Electricity Division versus that of the Water & Sewage Division within M.U.L. When all the figures are combined as one entity in current practice, each Division's accounting, performance, and reporting	*Recommendation is noted.*	*The Financial Controller and the Managing Director will be responsible for reviewing the feasibility of the recommendation after the audit statements are fully updated. The will be expected to present a proposal to the Board.*	*2026-27*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
Groundwater from Wells. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis.	are not clear for external stakeholders to understand and to assess. Given their different mandates, and given their separate portfolios of utility-services to administer, the including of unconsolidated financial reports and budgets will make comparisons with each Division's budgets and targets much easier to achieve, and will improve communication with all stakeholders. Enhanced calculation and analysis of variances, more accurate budgeting, more complete disclosure, and better monitoring and evaluation will be among the benefits from an integrated approach to budgeting, accounting, and reporting.			
4.22 Insufficient verification of assets; doubtful valuations. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of	**4.29 Perform regular physical checks of all assets.** At least annually, the Company should physically inspect, document, and assess all of its assets. This requires site-visits to all of its locations, from Head			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
Groundwater from Wells. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.41** Limited battery-storage**.** **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	Office to the Power Station to the warehouses to the pumping stations to the reservoirs and catchments/wells. For added assurance, such checks should be observed by independent persons (e.g., external auditors, Internal Audit Department, and/or Office of the Auditor-General). This will also address one of the recurring causes of past Qualified Audit Opinions on the Company's financial statements, and a major risk to future adverse audit-conclusions.			
4.22 Insufficient verification of assets; doubtful valuations. 4.33 Huge losses of water through leaks and wastage. **4.36** History of frequent interruptions of the electricity-service**.** **4.36** History of frequent interruptions	**4.30 Review estimated useful lives and depreciation-rates for all assets.** At least annually, the Company should reassess original estimates of useful lives and rates of depreciation for each category of asset. These estimates and assumptions should be revised conservatively in the light of evidence from repairs and maintenance history,			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
of the electricity-service**.** **4.37** Current electricity crisis. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	physical checks, and current condition of assets at each Balance Sheet date. E.g., it might be more reasonable to depreciate buildings over 30 to 40 years rather than 50 years. E.g., it might be more prudent to depreciate generators and other types of high-use equipment over 10 years or less, given the actual patterns of usage, and given that some assets procured by or for M.U.L. were used/second-hand assets when they were acquired by the Company.			
	Chapter 4: Effectiveness: Part 2: Performance Management			
4.6 Negative bottom line: Long-term trend of net losses**.** 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs.	**4.52 Reduce leaks, and prevent new ones, throughout the water-infrastructure**. The Company should review, document, and monitor procedures for detecting and promptly repairing leaks at catchments, in distribution-	*Recommendation noted and agreed.*	*Working is ongoing with funding through the Government of Montserrat and the UK government to rehabilitate the various spring across the island. The Managing Director along with Ministry of BUILT and MoFEM have overall responsibility for the implementation.*	*August 2024*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.13 Low levels of debt; low cost of debt. 4.33 Huge losses of water through leaks and wastage. 4.34 Chart: Montserrat's Water Dilemma: Rapid Declines in Output from Spring-Catchments; Major Withdrawals of Groundwater from Wells. 4.35 Rising demand for bottled / drinking water and related beverages. **4.46** The local impact of the global climate-crisis: reduced rainfall. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	networks, and elsewhere on the island. It should strengthen its programme for preventative maintenance to minimise the likelihood of new leaks, of broken pipes, and of damage to reservoirs and catchments. Improved technologies such as sensors and drones can greatly improve the Company's ability to pinpoint the locations of existing leaks as well as points of weakness or high risk within the infrastructure. Smart uses of technologies can improve surveillance of, and access to, difficult-to-reach locations, and can also improve the safety of the Company's frontline workers, both in regular operations, and in times of emergencies (e.g., earthquakes, floods, storms, and hurricanes) and post-disaster assessments and recoveries.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.13 Low levels of debt; low cost of debt. 4.32 Montserrat has several untapped springs. 4.33 Huge losses of water through leaks and wastage. 4.35 Rising demand for bottled/drinking water and related beverages. **4.44** Few water-coolers and water-bottle refilling stations are at public venues. **4.46** The local impact of the global climate-crisis: reduced rainfall.	**4.53 Assess the opportunities for harvesting the untapped springs.** To avoid the continued over-reliance on the Belham Wells, and to address the rapidly rising risks of depletion of ground-water reserves, the Company should explore the use of the other identified springs on the island. Rainwater-collection and harvesting of fresh surface-water should always be the first and second choices of water-supply. Whilst every household and business in Montserrat can contribute to rainwater-collection and conservation-methods, M.U.L. is best positioned to continue the central management of the nation's springs. The greater use of spring-water will allow underground reserves to remain for strategic use, including [a] enhanced national security and [b] temporary support in times of emergency, to alleviate interruptions of regular water-supplies (e.g., when parts of the distribution-network are damaged; deliberate turning off of supply during	*Recommendation is noted*	*Will be determined by the Board in partnership with Ministry of BUILT*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	repairs/upgrades to the network), or when there are periods of repairs, maintenance or renovations at any of the existing tapped springs/catchments.			
3.19 Customers have strong interest in online payments and electronic channels**.** 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.** 4.6 Negative bottom line: Long-term trend of net losses**.** 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.10 The administrative expenses continued to rise rapidly. 4.33 Huge losses of water through leaks and wastage. 4.35 Rising demand for bottled/drinking	**4.54 Seize the opportunities for exports to water-scarce neighbouring islands.** By reducing leaks and wastage, and by developing and managing existing and new springs and wells, the Company can greatly increase both the realisable output from current production and distribution, and harness the large revenue-potential for surpluses of output to supply export-markets. Surpluses can supply both new on-island business-opportunities (e.g., bottled water for local residents; expanded capacity to supply visitors, day-trippers, yachts, cruise-ships, and long-stay tourists; economic (re-)growth per SDP Goal #1; population rebuilding per SDP Goal #5) and new exports. Inspiration can be taken from past successes: e.g., in the wake of the volcanic crisis, it is noteworthy that new	*Recommendation is noted*	*Will be determined by the Board in partnership with Ministry of BUILT*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
water and related beverages. **4.46** The local impact of the global climate-crisis: reduced rainfall.	opportunities arose and have been seized by local entrepreneurs: e.g., mining and exports of sand and aggregate materials for the construction industry. What began as a tragedy has led to Montserrat's current biggest export-earner: rising from E.C.$5,638,001 in year 2014 to E.C.$16,619,863 in year 2022.			
3.19 Customers have strong interest in online payments and electronic channels**.** 3.21 Low public profile; Little / no use of online presence, payments, and social media**.** 3.22 Updates (mid-2024) re M.U.L.'s website; limitations observed**.** 4.33 Huge losses of water through leaks and wastage. **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43 Inadequate framework for private solar-arrays to**	**4.55 Enhance outreach, education & engagement for households and businesses.** The Company should develop and implement a strategic approach to public education: e.g., about utilities, health and safety aspects, procedures for reporting leaks or other faults, and methods of conserving water and electricity. Reducing waste will result in lower bills for customers and lower costs to the Company.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
supplement national grid. **4.44** Few water-coolers and water-bottle refilling stations are at public venues. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	More sustainable practices by businesses, by households, by public-service Ministries and Departments, and by farmers can achieve further reductions in overall national per-capita consumption of water (and energy, since water-pumps require energy). This will lead to better management of water-resources, while boosting the net available amounts for new uses, for new businesses, and for the long-term growth of exports/tourism, further contributing to sustainable economic growth (per Montserrat's SDP Goals #1, #2, and #3).			
4.6 Negative bottom line: Long-term trend of net losses**.** 4.7 Water-rates and electricity-prices remain unchanged for 20 to 30 years, while costs to M.U.L. soared. 4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.10 The administrative	**4.56 Introduce value-added products to boost revenues and profitability.** The current decades-old business-model limits the Company to low profit-margins on, and bulk production and delivery of, electricity and piped water. However, as with most natural resources, bulk commodities have much lower value and profitability than value-added products	*Recommendation is noted*	*Will be determined by the Board in partnership with Ministry of BUILT*	

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
expenses continued to rise rapidly. 4.13 Low levels of debt; low cost of debt. 4.32 Montserrat has several untapped springs. 4.35 Rising demand for bottled/drinking water and related beverages. **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43 Inadequate framework for private solar-arrays to supplement national grid.** **4.44** Few water-coolers and water-bottle refilling stations are at public venues. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	from those same commodities. An obvious example, in line with the Cabinet's Policy Agenda and the objectives of the SDP, is to add nationally branded bottled drinking water to the Company's portfolio of products. The cost of locally sourced water is a fraction of the cost of importing foreign bottled water over long distances from outside the Caribbean, thus enabling M.U.L. to compete effectively with imported brands at a (much) lower cost to consumers. Various product-sizes and formats (e.g., individual 0.5-litre and 1-litre bottles versus 5-gallon and 10-gallon dispensers for events, schools, businesses, and workplaces) will serve a broader range of customers and types of use. Emphasising refillable, reusable, and recyclable containers, will further add to safe, healthy, and environmentally responsible consumption and production (per Montserrat's SDP Goals #1, #2, and #3, and towards national achievement of the			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	global Sustainable Development Goals: S.D.G. #3 [Health], S.D.G. #6 [Clean water and sanitation], S.D.G. #11 [Sustainable cities and communities], S.D.G. #12 [Sustainable consumption and production] and S.D.G. #13 [Climate action]).			
4.32 Montserrat has several untapped springs. 4.35 Rising demand for bottled/drinking water and related beverages. **4.44** Few water-coolers and water-bottle refilling stations are at public venues.	**4.57 Illustration:** This represents a win-win opportunity for the Company, for Montserrat, and for customers: [1] more local choices for the local market; [2] economic growth (both through increased local production and through reduced imports); [3] new jobs; [4] higher verifiable quality (e.g., M.U.L.'s water is regularly tested internally and externally, but not all imports are tested or have known quality); [5] much less ecological impact (e.g., long-distance shipping incurs much higher			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	costs of fuel and much greater carbon-emissions; imported plastics are not being recycled and pose environmental risks and public-health hazards); [6] opportunities for local production and/or recycling of bottles (further reducing costs and imports); and [7] net savings to customers.			
4.32 Montserrat has several untapped springs. 4.35 Rising demand for bottled/drinking water and related beverages. **4.44** Few water-coolers and water-bottle refilling stations are at public venues.	**4.58** Moreover, the revenues and profits per litre of bottled water are large multiples of the price charged/revenue earned from bulk piped water. For example, the Company's current business-model charges an extremely low fixed minimum for domestic usage up to 1,000 gallons per month (e.g., E.C.$15 per month = 50 cents per day). However, that same volume of water could yield 4,000 litres of bottled water or 8,000 half-litres of bottled water or 16,000 quarter-litres of bottled water. In this example, at a price as low as E.C.$2 or E.C.$3 dollars per bottle, and with even 25 cents to E.C.$1.00 of gross profit per bottle, the Company would realise tens			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	of thousands of dollars of revenues and thousands of dollars of net profits --- versus a fraction of a cent of revenue per gallon for bulk piped water. At the moment, all of these revenues and profits are going to foreign brands.			
4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.13 Low levels of debt; low cost of debt. 4.32 Montserrat has several untapped springs. 4.33 Huge losses of water through leaks and wastage. 4.35 Rising demand for bottled/drinking water and related beverages. **4.39** Limited installed capacity for storage of water and of sewage. **4.50** Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	**4.59 Repair/replace all old water-tanks and sewage tanks.** The Company should urgently put in place a strategic programme of comprehensive repairs and maintenance for all installed water-tanks/reservoirs and sewage-tanks. Furthermore, the Company should engage the support of the MCWLE, the MOFEM, and funding partners to achieve the timely replacement of all old storage-tanks when they reach the end of their optimal useful lives. This will contribute to continuity of utility-services as			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	well as enhance safety of infrastructure and reduce/eliminate current risks to public health and to the environment.			
4.8 Other countries, including British Territories, regularly raise their rates to cover costs. 4.13 Low levels of debt; low cost of debt. 4.32 Montserrat has several untapped springs. 4.33 Huge losses of water through leaks and wastage. 4.35 Rising demand for bottled/drinking water and related beverages. **4.39** Limited installed capacity for storage of water and of sewage. **4.44** Few water-coolers and water-bottle refilling stations are at public venues. **4.50** Operational implications of hotter climate**.**	**4.60 Increase storage-capacity for water and sewage.** The Company should urgently put in place a strategic programme for managing assets and infrastructure to ensure that, at the minimum, installed capacity keeps pace with, and, ideally, stays ahead of, residents' and businesses' needs in each part of the island. Furthermore, the Company should engage the support of the MCWLE, the MOFEM, and funding partners to invest in new storage capable of fully supporting the regrowth of the population, the regrowth of the economy, and all identified export-opportunities. Towards improving national resilience, the Company and partners should identify suitable means and locations for additional water-storage tanks within communities. This will provide on-site supplementary supplies at the	*Recommendation noted and agreed.*	*Working is ongoing with funding through the Government of Montserrat and the UK government to rehabilitate the various spring across the island. The Managing Director along with Ministry of BUILT and MoFEM have overall responsibility for the implementation.*	*August 2024*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.51 Public / employee health implications**.**	local level whenever there are short-term interruptions of supplies from the national level of infrastructure (e.g., during periods of repair; emergencies; disasters). As a part of a whole-of-Government, whole-of-society strategy, the Company should work with the MCWLE, the MOFEM, and the Cabinet to encourage/incentivise households and businesses to install mosquito-proof water-tanks at the micro-level.			
4.6 Negative bottom line: Long-term trend of net losses**.** 4.32 Montserrat has several untapped springs. 4.35 Rising demand for bottled/drinking water and related beverages. **4.39** Limited installed capacity for storage of water and of sewage. **4.41** Limited battery-storage**.** **4.44** Few water-coolers and water-bottle refilling stations are at public venues.	**4.61 Increase the availability of water-coolers / dispensers & bottle-refilling stations.** The Company should actively engage Ministries, Departments, organisations, workplaces, construction-sites, promoters of public events, businesses, and other stakeholders. In line with the United Nations' S.D.G. #3, and Montserrat's S.D.P. Goal #3, a key collective outcome is to ensure the widespread and consistent availability of drinking water, functioning water-coolers, water-dispensers, and well-maintained bottle-refilling stations at all workplaces,			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.50 Operational implications of hotter climate**.** **4.51** Public / employee health implications**.**	schools, festivals, events, and other public places. The intersections of national utilities, water-quality, water-supply, and public health involve multiple Ministries, Departments, and other stakeholders. This, in turn, requires a whole-of-Government integrated approach to health-promotion, public education, and the provision of easy access to safe water (and healthier foods and beverage options, generally). The GOM/public service can lead by example with demonstrated commitments to healthier choices, both for its employees and for its customers, including emphasis on the availability and promotion of drinking water, at all workplaces, in-house events, externally hosted events, entertainments, etc.			
4.6 Negative bottom line: Long-term trend of net losses**.** 4.9 Long-term trend of slightly declining utility-usage.	**4.62 Increase the availability of electric / solar recharging stations / outlets.** The Company should actively engage Ministries, Departments, organisations, promoters of public events, businesses, and other			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.13 Low levels of debt; low cost of debt. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources. **4.43 Inadequate framework for private solar-arrays to supplement national grid.**	stakeholders to expand the island's network of electric recharging stations for electric and hybrid vehicles, as well as mobile phones and other devices. This would represent a major step forward in integrating M.U.L.'s, MCWLE's, and other partners respective mandates and contributions towards the SDP, the S.D.G.s, and the Montserrat Energy Policy. Increased provision for, and ease of using, electric / hybrid vehicles will encourage more drivers to switch from fossil-fuel vehicles to electric / hybrid, further boosting the demand for safe, clean energy. Integrating solar power with local electricity-services at these points of access/service will further enhance resilience of infrastructure and public services by reducing (and ultimately eliminating) the need for imported fuels. This strategy will also boost revenues for the Company.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.6 Negative bottom line: Long-term trend of net losses**.** 4.9 Long-term trend of slightly declining utility-usage. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.13 Low levels of debt; low cost of debt. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources.	**4.63 Greatly increase the contribution of solar energy to the national grid.** To achieve the Montserrat Energy Policy and the 2030 Agenda for Sustainable Development, the Company, together with stakeholders such as the GOM, the FCDO, and other funding partners, must urgently accelerate the investment in green solutions for the island's energy-supply. While exploring the best ways of harnessing the country's untapped wind-power, tidal power, and geothermal sources, the Company and stakeholders should immediately build on the solid foundation of installed solar-arrays, and at least double the solar capacity.	*Recommendation noted*	*Working is ongoing with the Government of Montserrat determine the best way forward in terms of mix of renewable energy. Managing Director will lead on discussions for MUL*	*August 2024-Ongoing*
4.6 Negative bottom line: Long-term trend of net losses**.**	**4.64 Greatly increase and optimise battery-storage.**	*Recommendation noted.*	*Work is ongoing with Government of*	*August 2024-Ongoing*

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.13 Low levels of debt; low cost of debt. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources.	To optimise both current and future investments in solar energy, and any other renewable sources of electricity, the Company must **urgently activate** and **fully utilise** the installed battery-storage capacity. Next, it must increase on-island energy-storage capacity to ensure that no surpluses are lost, and that there is added resilience island-wide from the integration of micro-grids. The greater the supply and storage of energy from solar-arrays, the greater will be: [a] the savings of fuel-costs, [b] the reduction of greenhouse-gas emissions, and [c] the lower will be the risks to energy-security and to national security.		*Montserrat in regards to improving battery storage capacity. MD is MUL lead.*	
4.6 Negative bottom line: Long-term trend of net losses**.**	**4.65 Optimise the legal and regulatory framework to incorporate private grids.**	*Recommendation noted*		

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
4.9 Long-term trend of slightly declining utility-usage. 4.11 The Fuel Surcharge is volatile and is the biggest component of electricity-bills. 4.13 Low levels of debt; low cost of debt. **4.36** History of frequent interruptions of the electricity-service**.** **4.37** Current electricity crisis. **4.40** Important progress achieved in solar energy, but the pace is too slow. **4.41** Limited battery-storage**.** **4.42** No contribution from geothermal, wind, or other non-solar green sources.	As a whole-of-Government and whole-of-society framework demands, the Company should collaborate with the GOM to address all gaps and deficiencies in current laws, regulations, and policies relating to: [a] renewable energy, [b] energy-conservation, [c] private solar-arrays, and [d] other forms of contribution to the national grid by households and by businesses. Remove barriers to private-sector investment in renewable energy. Provide a comprehensive framework to incentivise individuals, households, and businesses to invest in: [i] solar water-heaters, [ii] solar-electricity, and [iii] other forms of renewable energy and [iv] energy-conservation.			

Findings	*Recommendations*	*Management Response*	*Actions Undertaken To Date & Responsibility*	*Date of Planned Implementation*
	Explore public-private partnerships to accelerate the Company's/GOM's investments in renewable energy, thus boosting the local economy and expanding the role of the private sector in sustainability. These efforts will collectively contribute to the implementation of the Montserrat Energy Policy and the achievement of the SDP Goals #1, #2, and #3, as well as multiple global Sustainable Development Goals.			

The Financial Secretary (Ag)
Ministry of Finance & Economic Management
20th December, 2024

Background

National utility-services are topics of broad public interest and M.U.L. was specially requested for study by feedback from a range of stakeholders, given widespread and long continuing concerns: e.g., [a] repeated interruptions of the electricity-services, [b] annual deficits in the Company's finances, and [c] the Company's growing calls for the GOM's assistance in paying loans, in paying suppliers, and in providing capital-funding. This performance audit focused on (1) the governance and processes of the Company, (2) the GOM's policy framework for utilities, especially water and electricity, and (3) the Company's efficiency, effectiveness, and accountability in its use of resources. These connected dimensions have implications (a) for governance, (b) for departmental stewardship of public funds and other assets, and (c) for the quality of outputs, of outcomes, and of the delivery of services to the public. In turn, the Company's and the GOMS's policies and operations impact every public employee (e.g., through services and utility-bills) and to every business (e.g., conditions of work for employees; cold storage of perishable items; delivery of products/services to customers). By extension, public services, especially vital utilities, affect the economy and society of Montserrat. This is important since, in the post-1995 era, the central GOM and the wider public sector constitute, directly and indirectly, about 75% of GDP and roughly 65% of full-time employment in the national economy, and they have numerous multiplier effects.

Objectives of the Audit

Purpose and mandate. This study was one of the topics of interest to the public, arising from years of stakeholders' feedback, including a focus-group in February, 2020, and contributes to the O.A.G.'s mandate to provide assurance about the efficiency and the effectiveness of the GOM's spending. This audit sought to examine the efficiency and the effectiveness of the management of electricity and water by the Company, including the level of governance, the quality of the processes of planning and budgeting, the use of people and assets, and overall performance. We considered (a) the quality of internal records, monitoring, and reporting, (b) the related management of human, financial, and other resources, (c) interviewees' reported issues, limitations, and challenges and their causes, and (d) their impact on the efficiency and effectiveness of participating Departments/entities. Finally, the study aimed to assess the impact of the Company in relation to major policies and strategic plans, including [1] the GOM's Consolidated Budget, [2] the Cabinet's Policy Agenda, [3] the Montserrat Energy Policy, and [4] the Montserrat Sustainable Development

Plan (SDP) 2008 to 2020, and its sequels. In particular, we sought to identify the major planning challenges, budgeting deficiencies, and operational issues facing the Company and related stakeholders, and, hence, opportunities and recommendations for improving their outputs and outcomes for all stakeholders [i] in reporting, assessing, and collecting amounts owed by customers for utilities, and [ii] in maintaining fixed assets, distribution-networks, and related infrastructure.

Key questions. The overall objective of the audit was to assess whether the Company is managed efficiently and effectively in providing electricity and water to the public, while transitioning to renewable energy. To answer this overarching question, we considered 4 issues:

[a] Are the objectives of M.U.L. and related Departments clear?

[b] Do M.U.L. and related Departments have the governance and organisational structures in place to deliver their objectives?

[c] Has M.U.L. applied good practices in the use of its resources to meet its objectives?

[d] How is M.U.L. performing against its objectives/metrics?

Criteria used.

Criteria used for assessing the strategic objectives in this audit were:

(1) Are there clear, stated objectives that are aligned to the overall strategy?

(2) Are there plans detailing how the objectives will be met?

(3) Are the related KPIs/metrics defined and explained?

Criteria used for assessing the key performance indicators (KPIs) in this audit were:

(1) Are KPIs clearly stated?

(2) Are KPIs correctly classified?

(3) Are KPIs appropriate?

(4) Are KPIs measurable and effective?

Criteria used for assessing the use of information in this audit were:

(1) Is there a clearly defined system of accountability?

(2) Are Departments regularly reporting their progress against budgets and strategic plans?

(3) Do reportees give appropriate and timely feedback to reporters?

(4) Is there evidence of an effective feedback-loop whereby measuring, reporting and monitoring of progress (or lack of it) results in timely actions and better decision-making?

Scope of the Performance Audit

The scope of this performance audit was to examine the history, the performance, and the status of the Company over the years since the merger of Montserrat Electricity Services Limited (MONLEC) and the Montserrat Water Company c. year 2008. We emphasised the past 5 years' trends of planning, budgeting, and use of resources within the Company and related entities in managing the GOM's assigned portfolio of utilities, with a focus on electricity and water. We included the Company and several related entities in our interviews of stakeholders in order to assess the perspectives and the experiences of stakeholders regarding the Company vis-à-vis its mandate, structure, efficiency, quality of outputs, communication, quality of service, and overall performance. Financial and other data-analyses focused mostly on the prior 5 years (i.e., fiscal years 2017/2018 to 2021/2022). Where we received information subsequent to our fieldwork, more recent updates are provided in some parts of the report.

Scale of the Performance Audit

The scale of this performance audit included [a] Montserrat Utilities Limited, [b] the Board of Directors for M.U.L., and [d] the relations between the Company and stakeholders such as the MCWLE, MOFEM, suppliers, financiers, and customers. Prior performance audits by the OAG, as well as past audits by the GOM's Internal Audit Department, provided additional data and perspectives of many other stakeholders and other areas relevant to the background of this study.

What We Excluded from this Audit

We excluded data preceding those of the year 2008, except for background knowledge and local context (e.g., the history of MONLEC/M.U.L./Montserrat Water Co. since their structure evolved and was amended in years following the volcanic crisis since 1995). We excluded comparative analyses and other cross-country reviews. We also largely excluded regional and international data sets, except for background information, thus emphasising Montserrat-specific current and very recent historical data-sets. We did compare prices and indicators for other O.E.C.S. utility-providers, as well as other British Overseas Territories.

Why We Performed This Audit

Accountability to external donors. In Montserrat, the public sector is largely funded by the UK Government through its Foreign, Commonwealth & Development Office (FCDO). Over 60% of the GOM's recurrent spending and about 90% of its capital spending are funded [1] by external aid from the UK Government and [2] by grants from multilateral institutions. Hence, the MPS faces increasing scrutiny and accountability [a] for the management of public funds, [b] for the execution of strategic plans, and [c] for the delivery of programmes, of projects, and of outputs. Therefore, those providing aid have requested a series of performance reviews to provide greater assurance about public planning, budgeting, and implementation, including the efficient and effective use of people and other assets, all of which directly affect both the public sector and the private sector.

Development of Local Revenues/Economy. Since most of the island's employment is within or related to the public sector, the SDP aims at developing the private sector. However, a large percentage of the population remains dependent on the Government for locally funded services, including public education, for social housing, for social welfare, and various forms of assistance with building or repairing private homes. Public services and social services in Montserrat include welfare assistance with paying for utilities and have extended to occasional rebates to all households (e.g., during the COVID-19 era). As part of the policy towards increasing self-reliance, the GOM desires to grow the local economy, local employment, and local tax-revenues to fund public services. M.U.L.'s mandate is to ensure the provision of public utilities, which, along with the various public services administered by the GOM, are among the biggest sources of local revenue for the GOM/public sector and primary drivers of economic activity for the country.

Governance & Quality of Public Services. As it is entrusted with the administration of a major portion of the local public utilities (apart from telecommunications and internet-services), and because it is also partly funded by the GOM (through grants and loans, with the oversight of the MOFEM), the Company is accountable both for the collection of public revenues and for the use of public funds in each year's budget and operations. Efficient administration and effective collections require adequate attention to the level of front-line staffing, channels for payment, channels for

communication with stakeholders, and mechanisms for receiving, documenting, and resolving taxpayers' questions, concerns, and complaints. As the Company administers both revenue-collections and delivery of utilities, a two-way dialogue is essential for a high quality of public services. Residents/clients expect regular communication (e.g., re interruptions of essential services), prompt responses to complaints/fault-calls/queries, timely and reasonable billing, and timely delivery of services.

How We Performed This Audit

Interviews & site-visits. Initially, we engaged in interviews with employees of the Company and with senior public-sector officials across related departments, including site-visits to see the premises that they use and a broad sample of the Company's assets and properties. The list of interviewees is provided at the end of this Appendix. With the guidance provided by these meetings and inspections, we proceeded to devise questionnaires and data gathering techniques suitable for the purpose of assessing (i) the governance of the Company, including its strategic planning and budgeting, (ii) the efficiency and the effectiveness of data gathering, reporting, human resources, and interdepartmental communication and co-operation related to the use of resources, and (iii) the recent trends, outputs, and outcomes of their uses of resources.

Reviews of relevant law, regulations and literature. Before and during our fieldwork, we researched the GOM's policies, laws, and regulations related to utilities in order to establish the legislative framework for our performance audit. The programme of research also included literature on such relevant subjects as (a) governance, (b) strategic planning and national budgeting, (c) public sector efficiency and effectiveness, (d) monitoring and implementation, including project management and capital assets, (f) performance benchmarks, and (g) standards of service. These sources supplemented our reviews of various internal and external documents related to M.U.L.'s and the GOM's policies, structures, and operations affecting the issues of public planning, budgeting, procurement, and deployment of resources in the administration of the various utility-systems and client-services.

Internal & External Evidence. Various requests for information were made during August, 2023, to May, 2024, (with follow-up queries, confirmations, and clearance extending through September and October, 2024, arising from the Exit Meeting at the end of August, 2024). Site-visits, documentary reviews, analyses, and interviews with diverse stakeholders were concluded within this period. Emphasis was placed on factors affecting the Company's governance, planning, budgets, finances, implementation, efficiency, and performance. In particular, we sought to know (a) whether there were adequate staffing, skills and other resources during the past several years, (b) issues affecting the Company's processes, progress, and outputs, (c) the quality of reporting,

communication, and co-operation among the stakeholders, and (d) recommendations/opportunities for improvements. Above all, we sought to get key stakeholders' perspectives and experiences in assessing the overall resourcing, the financial management, and the sustainability of the Company.

Standards used. This audit was conducted according to standards promulgated by the International Organisation of Supreme Audit Institutions (INTOSAI) for performance audits. Those standards require that we plan and perform our audit in order to obtain sufficient and appropriate evidence to reach a reasonable conclusion about the performance of the entities/areas studied with regard to [a] their governance and [b] their management during the period under review. These standards also require us to communicate with auditees and other stakeholders throughout the stages of each audit. Emerging themes include: [a] gender-equity; [b] Multi-stakeholder engagement; [c] effective inclusion, especially vulnerable groups; and [d] fair access to public services. The international standards used to perform this audit-engagement and to assess the findings of this audit include ISSAI-P 12, ISSAI 100, ISSAI 3000, and GUID 3910.

Questionnaire for Interviewees

Correspondents & Interviewees

(1) The Financial Comptroller, M.U.L.
(2) The Accountant, M.U.L.
(3) The Human Resources Manager, M.U.L. / Corporate & Board Secretary
(4) The Customer Service Manager, M.U.L.
(5) The Financial Secretary, MOFEM, GOM
(6) The Deputy Financial Secretary, MOFEM, GOM
(7) The Managing Director, M.U.L.
(8) The Manager, Water Division, M.U.L.
(9) The Manager, Electricity Division, M.U.L.
(10) Other employees of M.U.L.
(11) Director of Education, Ministry of Education, GOM
(12) Chief Medical Officer, Ministry of Health, GOM

APPENDIX 2: KEY REFERENCES

[1] New funding from F.C.D.O. for M.U.L.:

https://www.zjbradio.com/news/2024/5/27/deputy-premier-welcomes-24-million-dollar-grant-from-fcdo-to-montserrat-utilities-limited

[2] More support from the GOM to M.U.L.:

https://www.gov.ms/2023/12/18/government-implements-measures-to-prevent-financial-collapse-of-mul/

[3] Limits on the engagement of audit-firms:

[a] European Union (2014). **Regulation (EU) No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC Text with EEA relevance.**

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0537

[b] Accountancy Europe (May, 2022). Mandatory Rotation of Auditors

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.accountancyeurope.eu/wp-content/uploads/2022/12/Audit-Rotation-2022_Accountancy_EU.pdf

[c] JCS Accountants, U.K. (June 30, 2021). Criteria and issues for reviewing external auditors

https://www.jcssutton.co.uk/news/blog/changing-auditors/

APPENDIX 3: M.U.L.'s ORGANISATIONAL & BOARD/COMMITTEE STRUCTURES

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

Chart #1: Management Structure

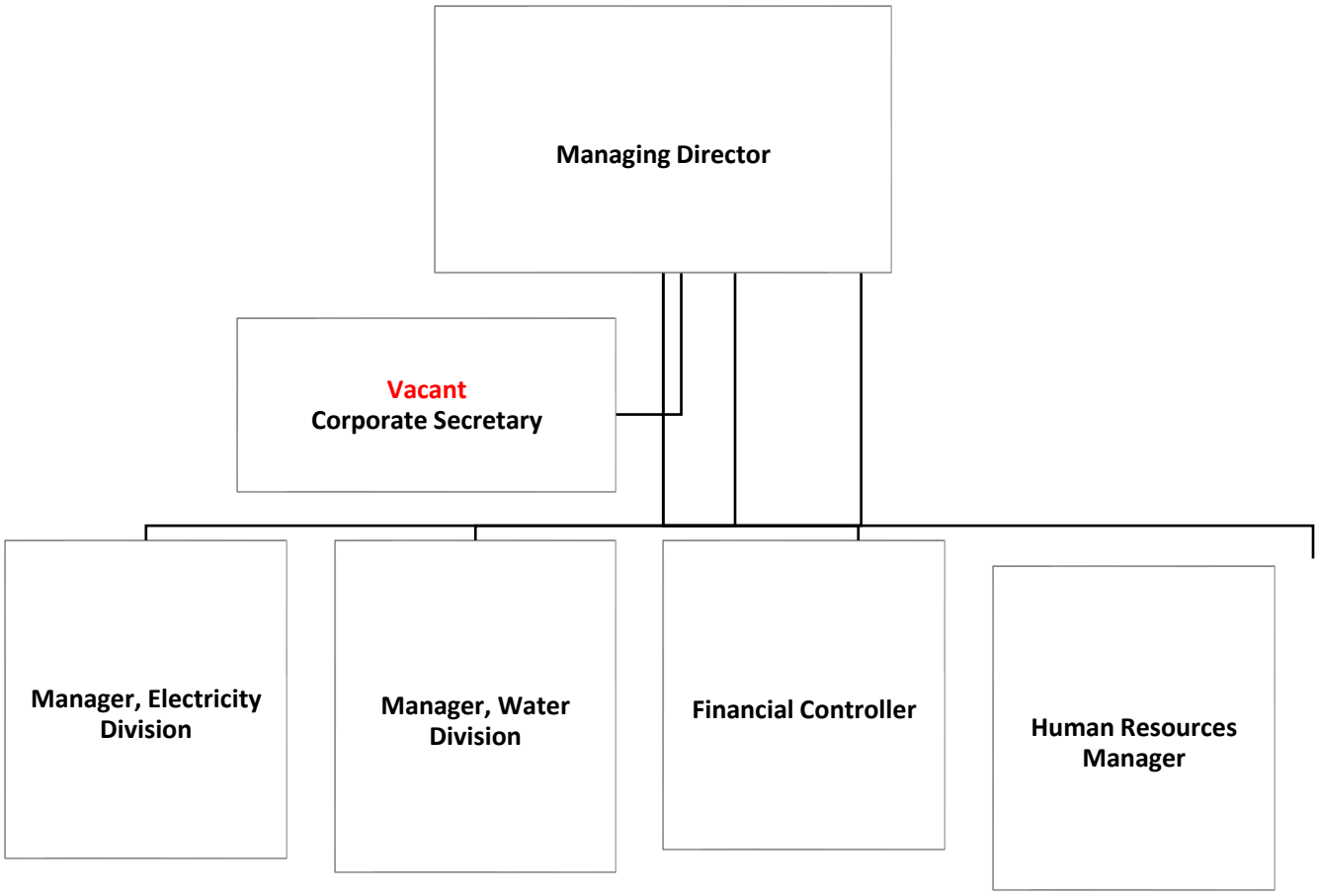


Chart #2: Head Office Administration

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

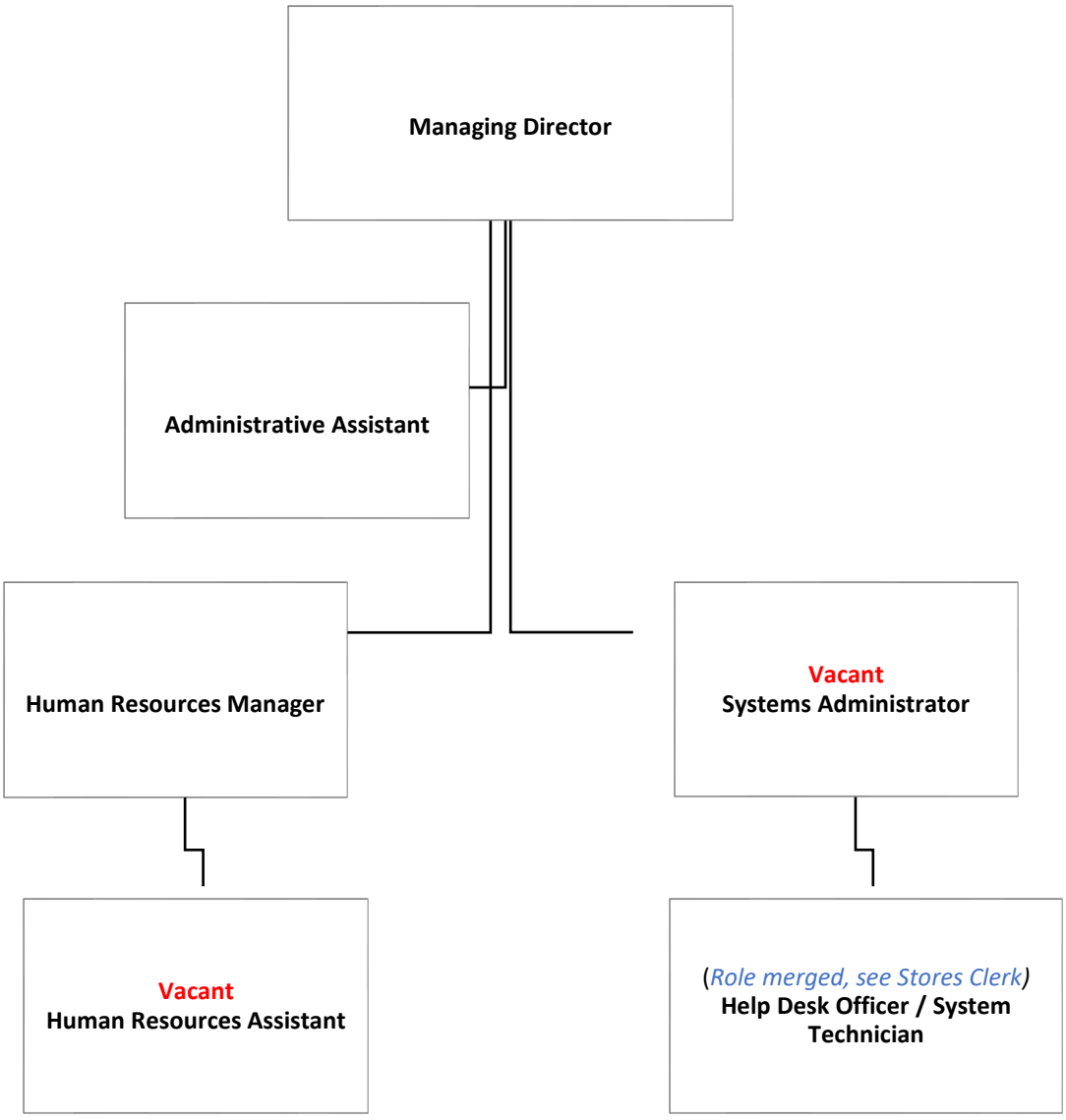


Chart #3: Finance/Accounting Division

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

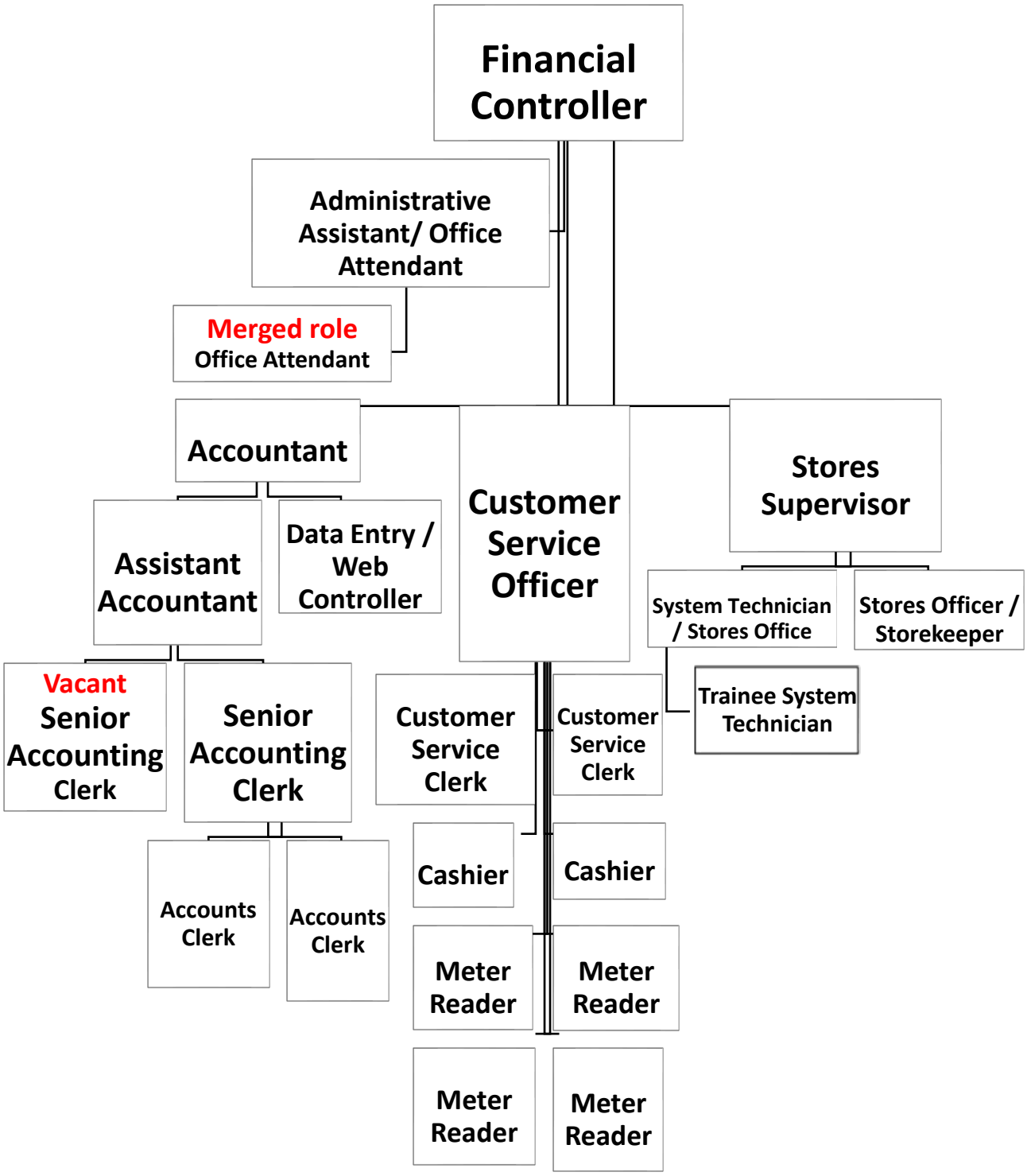


Chart #4: Generation Unit

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

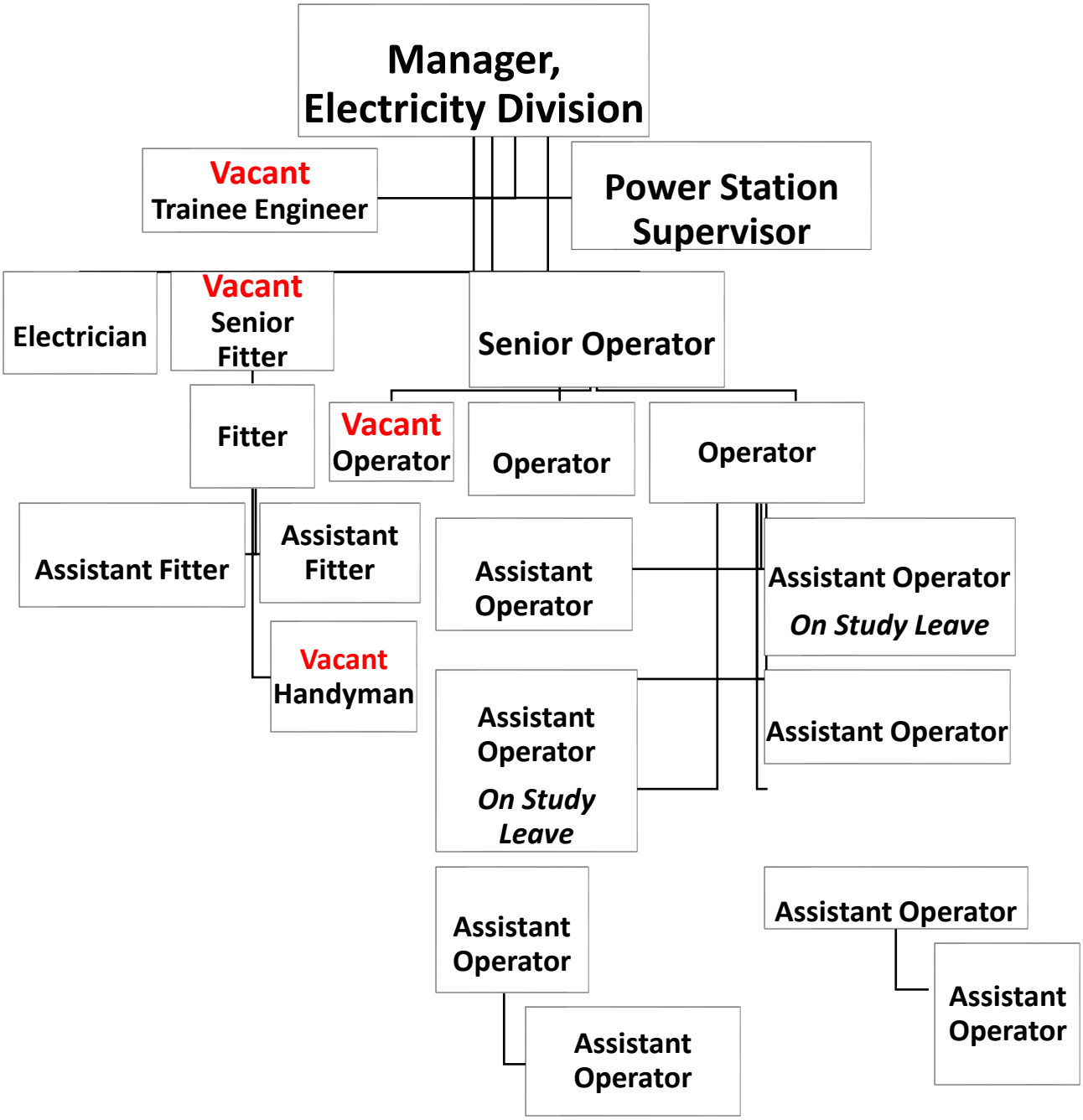


Chart #5: Transmission & Distribution Unit

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

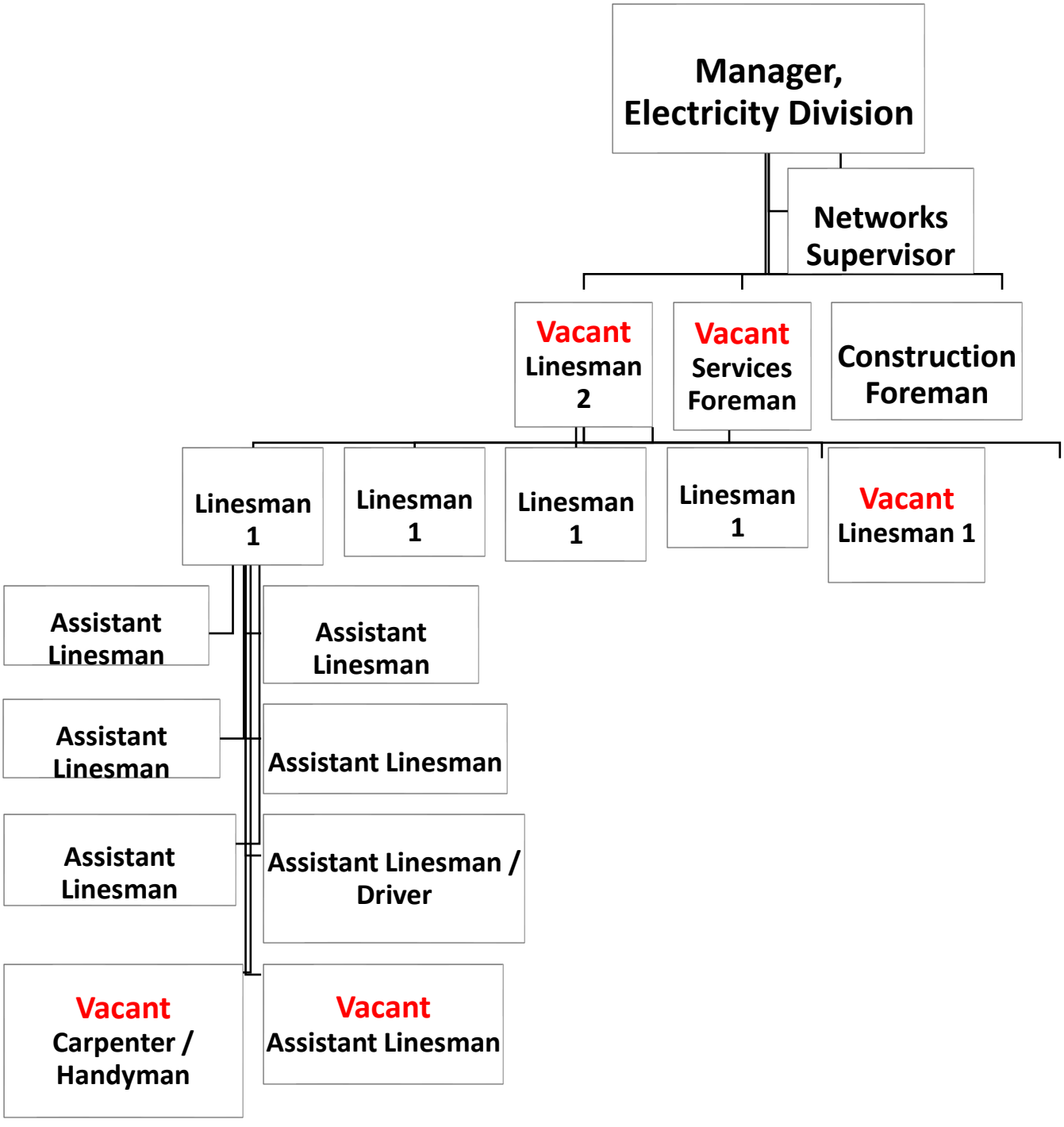


Chart #6: Water & Sewage Division

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

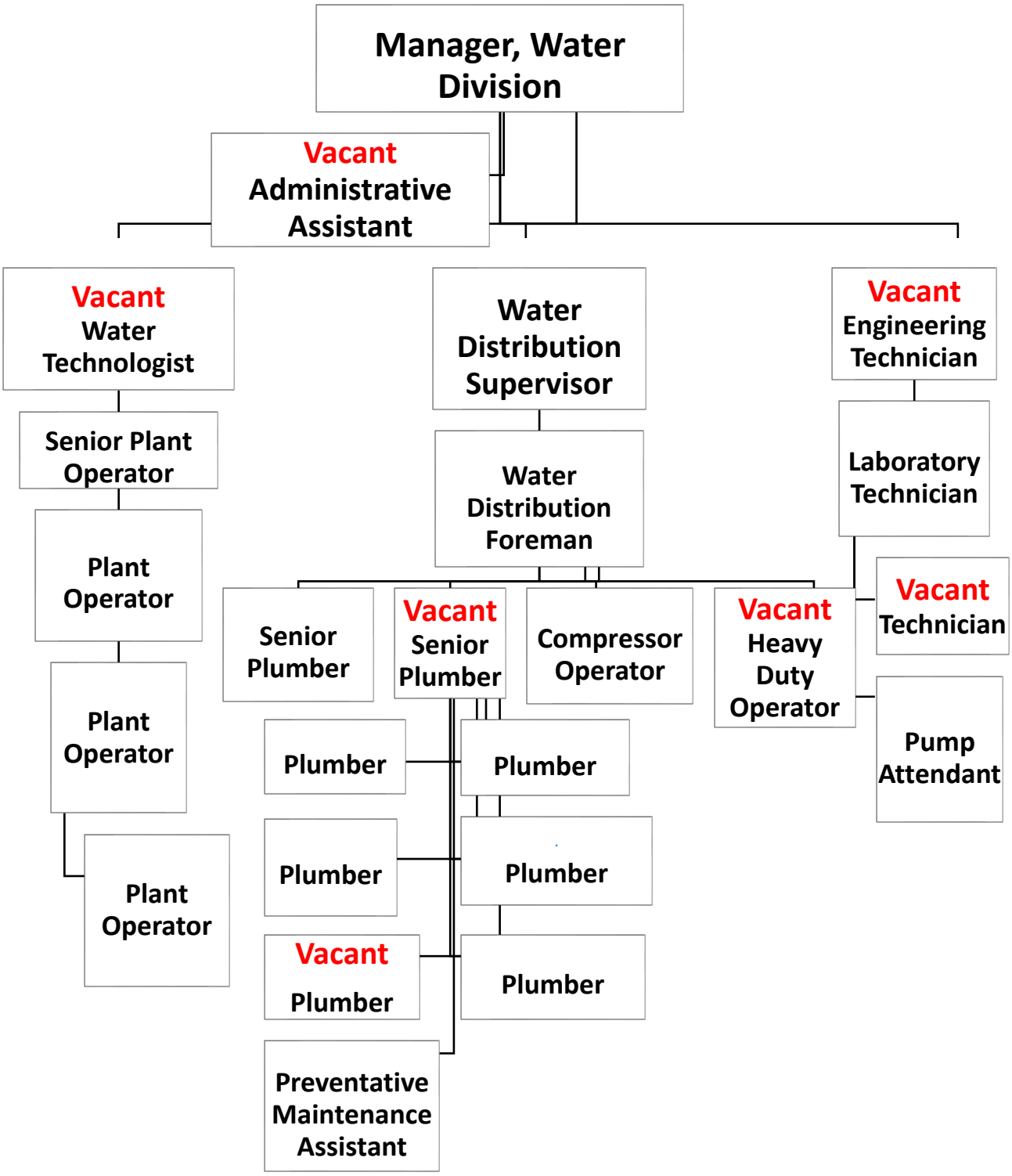


Chart #7: Board of Directors

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

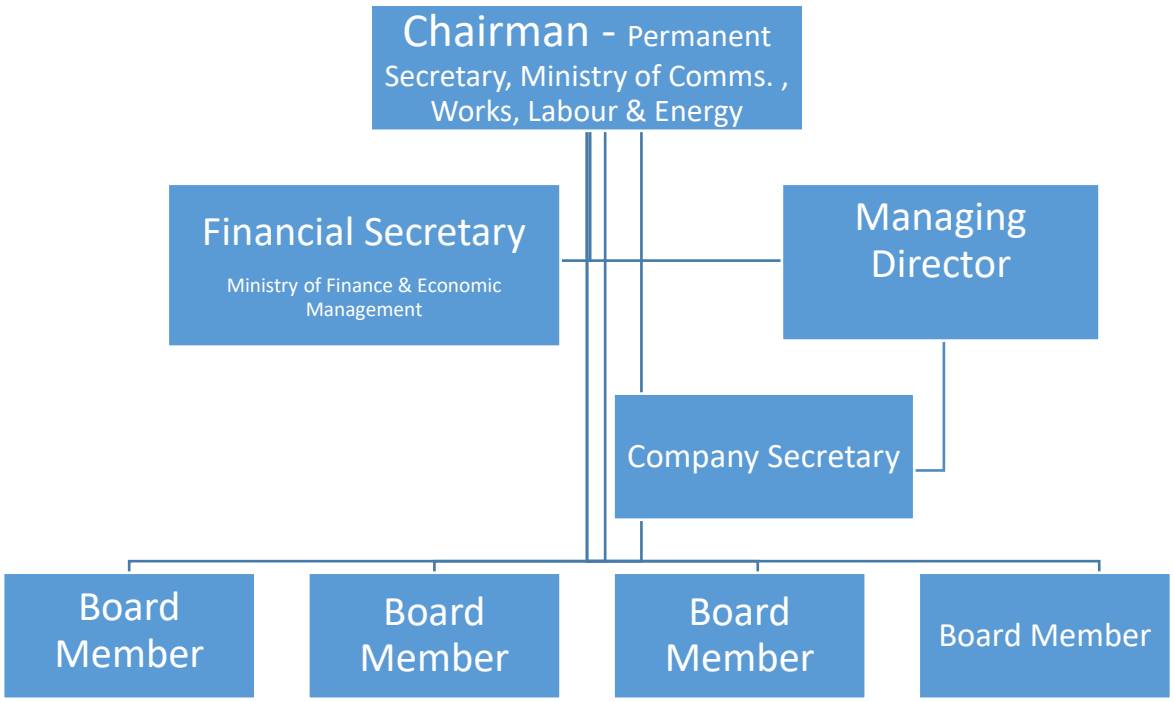


Chart #8: Board: Personnel Committee

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.

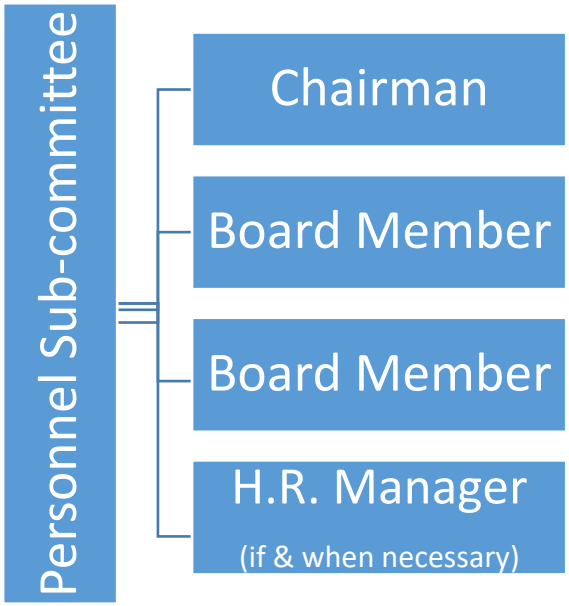


Chart #9: Board: Finance Committee

These charts are based on Montserrat Utilities Limited's corporate records up to year 2023.