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# Office of Utilities Regulation

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## DAIRY SPRING LIMITED WATER RATES

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### Determination Notice

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2020 March 05

**DOCUMENT TITLE AND APPROVAL PAGE**

**1. DOCUMENT NUMBER: 2020/WAS/001/DET.001**

**2. DOCUMENT TITLE: DAIRY SPRING LIMITED WATER RATES**

**3. PURPOSE OF DOCUMENT**

This document sets out the Office's decisions on Dairy Spring Limited's water rates.

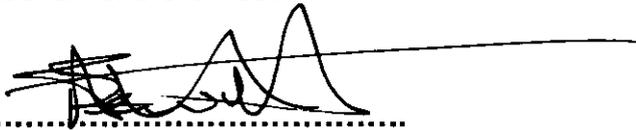
**4. ANTECEDENT PUBLICATIONS**

Publication Number	Publication Title	Publication Date

**5. Approval**

This document is approved by the Office of Utilities Regulation and the decisions therein become effective on 2020 March 05.

On behalf of the Office:



.....  
**Ansord E. Hewitt**  
**Director-General**

**2020 March 05**

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## 1. Executive Summary

- 1.1. Dairy Spring Limited (DSL) is a limited liability company, which was incorporated in 2001. In 2002, the National Water Commission (NWC) in accordance with section 27 of the National Water Commission Act (NWC Act) issued the Dairy Spring Limited Water Supply Licence, 2002 to DSL. Following the expiration of its initial 10-year non-exclusive water supply licence, DSL applied for and was granted the ***Dairy Spring Limited Water Supply and Distribution Licence, 2018*** (“the Licence”) on 2018 December 17 by the Minister of Economic Growth and Job Creation. The tenure of the company’s new Licence is for a period of twenty (20) years.
- 1.2. On 2019 August 27, DSL submitted a Tariff Application (“Application”) to the OUR for an increase in its water rates. The current rates have been in effect since 2011 February 11. The proposal is for a 50% increase in water rates per 1000 litres to both its commercial and export customer categories. Table 1.1 below shows the rates, which have been proposed by DSL.

**Table 1.1: DSL Proposed Water Rates**

Dairy Spring Limited								
Description	Existing Rates		Proposed Rates		Rate Change (gallons)		Rate Change (litres)	
	J\$/1000 gallons	J\$/1000 litres	J\$/1000 gallons	J\$/1000 litres	J\$	%	J\$	%
Commercial	\$700.00	\$154.00	\$1,050.00	\$231.00	\$350.00	50%	\$77.00	50%
Export	\$1,000.00	\$220.00	\$1,500.00	\$330.00	\$500.00	50%	\$110.00	50%

- 1.3. DSL stated in its Application that the proposed 50% increase in water rates is intended to recover losses in earnings and cover increased costs resulting from a 49.5% increase in inflation and a 60.7% devaluation of the Jamaican dollar since its current rates were implemented. The company further stated that the proposed rate increase is required to assist with loan repayments, financing of planned capital improvements and the funding of daily operating expenses.
- 1.4. DSL’s Licence allows for the computation of the company’s tariffs on a rate of return (or ‘cost plus’) methodology. However, in the context of limited availability of cost and operational data, the OUR has, over the years, applied what has been referred to as the ‘No Objection Policy’ to the approval of rates for private water and sewerage service companies. The ‘No Objection Policy’ is based on a principle that if the rates proposed by a private water or sewerage services provider are below those being charged by the NWC for comparable services, the Office would not object to the implementation of the proposed rates.
- 1.5. The OUR took note of the fact that DSL has revealed that 64.5% of its revenues were generated from its water operations, while the remaining 35.5% came from consultancy services. However, there was no separation of the company’s accounts that would allow the OUR to objectively isolate the costs exclusively attributable to its regulated water supply business. Based on this assessment the Office deemed that it would be prudent to apply the ‘No Objection Policy’ owing to the lack of details on cost and other critical operational variables.

- 1.6. Notwithstanding, the OUR used the limited data provided by DSL and computed the average cost of providing the water supply service. This analysis suggests that on average it costs DSL \$327.03 per 1000 litres to provide this service to its customers.
- 1.7. Additionally, given that water revenues accounted for approximately 64.5% of DSL’s total revenue, the OUR, in its analysis, applied that ratio to the company’s administrative (or shared) costs. The analysis suggests that if 64.5% of DSL’s costs are related to its regulated water business, then the average tariff should be \$213.40.
- 1.8. In applying the ‘No Objection Policy’ methodology, DSL’s proposed rate was compared with comparable rates for the NWC. It was also compared with comparative rates of the Runaway Bay Water Company (RBWC). For consumption levels below 9.1 liters per month, DSL’s proposed average tariff was 44.5% less than the rate charged by NWC and 26.7% below the rate charged by RBWC.
- 1.9. In light of this, the Office opted to accept DSL’s rate proposal based on the ‘No Objection’ principle. Table 1.2 below shows the details of the approved rates.

**Table 1.2 – Approved Rates for DSL**

Supply Category	Proposed		Approved	
	J\$/1000 gal	J\$/1000 litres	J\$/1000 gal	J\$/1000 litres
Commercial	1,050	231	1,050	231
Export	1,500	330	1,500	330

- 1.10. The approved rates shall become effective in 2020 March and is to remain in place for a period of, not less than, two years.
- 1.11. The billing data submitted by DSL shows that on average a commercial customer consuming 1,892.82 cubic meters would see a 50% increase in the total bill amount. See Table 1.3 below for details. Currently DSL has no export customers.

**Table 1.3 – Bill Impact Based on OUR Approved Rates**

<b>Bill Impact (Commercial Customer)</b>				
Description	Rates		Bill Change	
	DSL Existing Rates (J\$)	Approved Rates (J\$)	J\$	%
Rate per 1000 Litres	154.00	231.00	77.00	50%
Average Consumption ('000 litres)	1,892.82	1,892.82		
Total Bill Amount	291,494.73	437,242.09	45,747.36	50%

## 2. Definitions, Acronyms and Abbreviations

CAPM	-	Capital Asset Pricing Model
EE	-	Energy Efficiency
GCT	-	General Consumption Tax
Government	-	Government of Jamaica
GS	-	Guaranteed Standards
IG	-	Imperial Gallon
Licence	-	The Dairy Spring Limited Water Supply and Distribution Licence, 2018
Licensed Business	-	The supply of water by Licensee as authorized by the Licence
Licensee/DSL	-	Dairy Spring Limited
M	-	Million
MTAOP	-	“Meter Testing Administrative and Operational Protocol for the Electricity and Water Sectors in Jamaica, 2017” Document No. 2016/GEN/004/RUL.001
NRW	-	Non-Revenue Water
NWC	-	National Water Commission
OEM	-	Original Equipment Manufacturer
OUR Act	-	The Office of Utilities Regulation Act
OUR/Office	-	Office of Utilities Regulation
PSI	-	Pound per Square Inch
ROI	-	Return on Investment
ROR	-	Rate of Return
UFW	-	Unaccounted-for-Water
US	-	United States of America
WACC	-	Weighted Average Cost of Capital
WRA	-	Water Resources Authority
WSP	-	Water Service Provider

### 3. Introduction

- 3.1 Dairy Spring Limited (DSL) is a privately owned company, which is licenced to supply and distribute water in parts of the parish of Saint Ann as specified in Schedule 1 of the Licence. DSL was first issued with a Water Supply Licence in 2002. Following the expiration of its 2002 licence, DSL applied for, and was issued a new licence (the “*Dairy Spring Water Supply and Distribution Licence, 2018*”) by the Minister of Economic Growth and Job Creation on 2018 December 17.
- 3.2 DSL also holds a Water Abstraction Licence issued by the Water Resource Authority (WRA), which allows the company to abstract 3,406 cubic meters of water per day from the Dairy Spring located in Shaw Park, Ocho Rios, St. Ann.
- 3.3 According to DSL, its current water supply system allows it to divert, treat and distribute the licenced abstraction amount on a daily basis. To minimize the risk of downtime for its supply system, DSL has standby power facilities as well as specialized treatment and safety equipment for the handling of chlorine gas accidents.
- 3.4 The company’s customer base currently consists of eight (8) commercial customers. Even though, the company’s tariff structure has an export customer category, it currently has no such customer.
- 3.5 On 2019 August 27, DSL submitted a Rate Application (“Application”) for an increase in its rates and charges for commercial and export customers. The company explained in the Application that its last rate review was in 2011 February and since then it has had no adjustments to its rates.
- 3.6 The Office of Utilities Regulation (OUR) has conducted a review of DSL’s Application. Accordingly, this Determination Notice outlines DSL’s Application and sets out the OUR’s analyses and determinations. Additionally, the document summarizes customers’ feedback received by way of a consultation meeting held in 2019 October. The Determination Notice also delineates the service and guaranteed standards the company is required to observe in its operation.

## 4. Legal Framework

4.1 The OUR is a multi-sector utility regulator established pursuant to the Office of Utilities Regulation Act (“OUR Act”), with regulatory oversight of the provision of prescribed utility services in Jamaica. The supply and distribution of water are included among the prescribed utility services defined in section 2 and the First Schedule of the OUR Act.

4.2 Section 4(4) of the OUR Act expressly empowers the OUR to determine the rates charged for the provision of a prescribed utility service. This section reads:

*“(4) The Office shall have power to determine, in accordance with the provisions of this Act, the rates or fares which may be charged in respect of the provisions of a prescribed utility service.”*

4.3 In 2018, pursuant to the OUR Act, the Minister with portfolio responsibility for the water and sewerage sectors renewed the Licence of DSL to supply and distribute water to specified service areas in the parish of St. Ann. The provisions of the Licence reinforce the OUR’s statutory powers to regulate the Licensed Business.

4.4 With respect to price controls, Clauses 13.1 and 13.2 of the Licence provide that:

*“13.1 The Licensee is subject to the conditions and procedures set out in Schedule 3.*

*13.2 The rates to be charged by the Licensee in respect of the Prescribed Utility Service in relation to the Licensed Business shall be as determined by the Office from time to time.”*

4.5 The Licence stipulates that the rates and charges as determined by the OUR should provide a reasonable opportunity for the Licensee to make a reasonable return on capital employed after taking into account all reasonable costs incurred in the provision of services. Extracts from Schedule 3 of the Licence, provide as follows:

*“The rates for the supply of services by the Licensed Business shall be set such that the rates provide a reasonable opportunity for the Licensee to make a reasonable return on capital employed after taking into account all reasonable costs incurred in the provision of the services.*

*Revenue Requirement = operating costs + depreciation + taxes + return on investment, with each component defined as follows:*

*“Operating costs”: All prudently incurred costs, which are not directly associated with investment in capital plant...*

*“Return on Investment”: ...The return on investment shall be calculated by multiplying the allowed rate-of-return by the Licensee’s total investment base (“Rate Base”) for the test year. The allowed rate of return is the Licensee’s Weighted Average Cost of Capital (WACC). The WACC (“K %”) will balance the interests of both consumers and investors and be commensurate with returns in other enterprises having corresponding risks which will assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital...”*

4.6 The Licensee is permitted to apply to the OUR for a tariff review as needed, but no more frequently than once in every two (2) years. Schedule 3 of the Licence provides that:

*“At such intervals as the Licensee may determine but no more often than once in every two (2) years, the Licensee may submit an application for a tariff review. The Application must be supported with data and information as the Office will determine.”*

4.7 The last tariff approval for DSL was 2011 February 11.

4.8 Notwithstanding the provisions of Schedule 3 of the Licence, the Office, has applied a ‘No-Objection Policy’ to small private water and sewerage providers, whereby rates proposed by these providers are approved on a “no objection” basis, if they are below those being charged by the NWC for comparable services.

4.9 The Licence expressly states in Schedule 2 that the Licensee shall observe prescribed service standards, and it also authorizes the OUR to introduce new or vary existing guaranteed standards that will encourage and facilitate minimum standards of customer service.

## 5. Summary of the Tariff Proposal

- 5.1 DSL’s water supply facility is licenced to abstract 3,406 cubic meters of water per day. DSL has expressed the view that its water treatment plant is very efficient given that it registered a Non- Revenue Water (NRW) balance of 4.2% in 2018. The annual water sales for 2018 was 181,711 cubic meters.
- 5.2 DSL, in its Application, proposed the retention of its existing tariff structure. This structure does not include a fixed service charge, and is based on a single variable volumetric rate.
- 5.3 Table 5.1 below displays DSL’s rate structure along with its existing and proposed rates.

**Table 5.1: Comparison of DSL Current and Proposed Rates**

Dairy Spring Limited								
Description	Existing Rates		Proposed Rates		Rate Change (gallons)		Rate Change (litres)	
	J\$/1000 gallons	J\$/1000 litres	J\$/1000 gallons	J\$/1000 litres	J\$	%	J\$	%
Commercial	\$700.00	\$154.00	\$1,050.00	\$231.00	\$350.00	50%	\$77.00	50%
Export	\$1,000.00	\$220.00	\$1,500.00	\$330.00	\$500.00	50%	\$110.00	50%

- 5.4 In its Application, DSL requested a fifty percent (50%) increase in its commercial and export rates. The company indicated that its request is intended to address three dimensions of its business:
1. *Losses in earnings:* DSL pointed out that its cost has increased owing to a 49.5% increase in inflation (over the period 2011 January to 2019 June) and a 60.7% depreciation in the Jamaican dollar relative to the United States (US) dollar.
  2. *Loan repayments over the tariff period*
  3. *Planned capital improvements necessary for sustainability*
- 5.5 DSL’s total test year (i.e. for 2018) operating expense was \$45.86M<sup>1</sup> and may be broken down as follows:
- Direct expenses of \$1.17M; and
  - Administrative expenses of \$44.69M.
- 5.6 Table 5.2 below shows the components of DSL’s total operating expense in 2018.

<sup>1</sup> Inclusive of depreciation expenses  
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**Table 5.2: DSL Test Year Operating Costs**

<b>DSL 2018 Test Year Operating Cost</b>	
<b>ITEMS</b>	<b>J\$</b>
Water Treatment Charges	242,931
Project Charges	818,208
License	61,490
Contract Services	-
Casual Labour	47,500
<b>Total Direct Expenses</b>	<b>1,170,129</b>
<b>ADMINISTRATIVE EXPENSE:</b>	
contributions	10,872,659
Directors Remuneration	9,625,000
Rent	1,200,000
Depreciation	9,787,042
General Insurance	45,000
Health Insurance	1,212,339
Office Expenses and supplies	226,539
Motor Vehicle Expense	2,342,379
Staff Training	-
Staff Welfare	1,224,822
Utilites	1,004,800
Security	175,382
Interest	818,928
Audit Fee	185,000
Audit Fee Under Provision	-
Penalty	15,945
Bank Charges	101,027
Rates and Taxes	73,100
Travelling and entertainment	1,654,665
Stationary and Printing	135,900
Miscellaneous expenses	11,358
Legal and Professional fees	1,009,200
Repair and Maintenance	2,491,445
Donation and subscription	163,735
Annual Return	5,000
Advertising and Promotion	15,000
Meter Testing and Administrative	-
Regulatory Fees	-
Conference	97,130
Interest expense overstated- prior ye	-
Statutory deduction understated-prior	-
Withholding taxes	-
Asset Taxes	200,000
<b>Total Administrative Expense</b>	<b>44,693,395</b>
<b>Total Operating Cost</b>	<b>45,863,524</b>

5.7 DSL reported revenues of \$43.5M for 2018. It is important to note that DSL's operations is not exclusive to the supply of water to its customers. In reporting its revenues, DSL indicated that total revenue of \$43.5M is comprised of \$28.1M from water sales and \$15.4M from consulting income.

## 6. Evaluation of the Application

6.1 In evaluating tariff applications for small private water and/or sewerage companies, the OUR may choose to adopt one of two methodological approaches:

- 1) The Cost plus or rate of return approach; or
- 2) The ‘No-Objection Policy’ Approach.

### Cost Plus/Rate of Return Approach

6.2 Schedule 3 of the DSL Licence outlines the rate review process as predicated on the cost plus or rate of return methodology which includes, but is not limited to, the following procedure:

- Establishing a test year, which shall be the latest twelve (12) months for which there are audited accounts.
- Adjusting the test year costs to reflect normal expected operating conditions of the company.
- Determining a rate base to reflect net investments with adjustments where appropriate.
- Determining the revenue requirement (RR) as follows:

$$RR = \text{operating costs} + \text{depreciation} + \text{taxes} + \text{return on investment.}$$

6.3 This approach to the rate review process is aimed at setting rates for the supply of services, which provide an opportunity for the utility to make a reasonable return on capital employed in the business based on cost efficiency. Additionally, the rates approved should not be unfairly burdensome to customers.

### The ‘No-Objection Policy’ Approach

6.4 The ‘No-Objection Policy’ approach is usually applied when adequate and reliable costing and operation data are unavailable for the private provider seeking a rate review. In this context, the regulator is without an objective means of determining rates based on the company’s actual performance. Consequently, a second best option is to set rates by a benchmark approach, which involves an analysis of the approved rates of other licenced providers in the water and sewerage industry, including the dominant provider, NWC. Should the rates requested by the utility be less than those of NWC, the Office issues a “No-Objection” decision approving the requested rates. If however, the requested rate exceeds the referenced NWC rates, then the Office would approve rates consistent with a comparable firm in the benchmarking analysis.

## Methodological Approach

6.5 As a part of its Rate Application, DSL submitted its financial statements for the year ending 2018 December 31. However, it was apparent that the activities at the company encompassed more than just its water business. In its Application, DSL pointed out that of its total revenue of \$43.5M, the sum of \$28.1M was attributable to its water operations, and the balance of \$15.4M was derived from consultancy income.

6.6 In evaluating DSL’s Application, the absence of cost information solely attributable to its water supply operation presented a challenge to the determination of cost-reflective tariffs that are reasonable to the utility and fair to its customers. In light of this, the OUR considered it prudent to use the ‘No-Objection Policy’ approach in determining the tariff. Notwithstanding this decision, for analytical purposes the OUR opted to calculate an average rate that would be applicable to DSL in two scenarios:

1. *Full Cost Scenario:* All costs presented are attributed to DSL’s water operation;
2. *Reallocated Cost Scenario:* All direct costs are assigned to the DSL’s water operation and the shared cost (i.e. the administrative costs) are apportioned based on the 64.5%:35.5% revenue split between DSL’s water operation and consultancy business. Additionally, the derivation of the applicable value of the assets was derived by applying the same ratio.

## Analysis of DSL’s Operating Costs

6.7 DSL’s operating costs consist of direct expenses and administrative expenses. The company’s audited 2018 income statement shows total operating expenses of \$45.86M. DSL’s operating expenses for that year was comprised of direct expenses of \$1.17M and administrative expenses of \$44.69M. Table 6.1 below shows DSL’s total operating costs for the years 2017 and 2018.

**Table: 6.1 DSL Total Operating Costs for the year 2018 & 2017**

Details	2017	2018	% Change
Total Direct Expenses (J\$)	1,335,333	1,170,129	-12.37%
Total Administrative costs (J\$)	43,898,730	44,693,395	1.81%
<b>Total Operating Expenses (J\$)</b>	<b>45,234,063</b>	<b>45,863,524</b>	<b>1.39%</b>

### **Direct Expenses**

- 6.8 The OUR agrees that DSL's direct expenses of \$1.17M are typical of costs faced by water utility companies globally, and therefore has no objection to DSL's recovering direct operating costs as stated in its audited financial accounts.
- 6.9 The OUR also considered it necessary to include (1) regulatory service fees; and (2) meter testing costs in DSL's revenue requirement. Even though, these costs were not included in the company's audited financial statement, they represent expenses that are applicable to its operations going forward.

### **Regulatory Fees**

- 6.10 Clause 7.1 of the Licence provides as follows:

*“For each financial year of the Licence (i.e. the period running from April 1 in one year to March 31 of the following year) the Licensee shall pay to the Office on or before April 1 of that year, an annual Regulatory Service Fee of (i) \$125,000.00, or such other minimum Regulatory Service Fee that replaces this amount as may be prescribed by the Office pursuant to the OUR Act, OR (ii) an amount calculated at 0.25% of the annual gross revenues from the Licensed Business, as determined from the Licensee's audited financial statements for the most recent financial year prepared pursuant to this Licence, whichever of (i) or (ii) is greater.”*

- 6.11 Based on the revenue DSL attributed to its water operation in 2018, the regulatory service fee derived from 0.25% of the annual gross revenue would be \$70,152. Given that the Licence stipulates a minimum regulatory fee of \$125,000, this minimum fee was included in the revenue requirement for recovery of regulatory service fees.

### **Meter Testing Expense**

- 6.12 In light of the advances in the regulatory framework in relation to the Meter Testing Administrative and Operational Protocol (MTAOP), the OUR takes the view that these expenses will be incurred by DSL going forward.
- 6.13 The MTAOP was established and gazetted in 2017 October. The MTAOP regime requires that water and electric utilities test new or existing meters annually, and comply with the following meter testing and verification requirements:
- Pattern Testing and Approval,
  - Acceptance Testing and Approval, and
  - Customer Requests for Meter Accuracy Verification Checks

6.14 Table 6.2 depicts the OUR approved annual costs for MTAOP activities.

**Table 6.2 DSL’s Annual MTAOP Costs**

<b>COST ITEM</b>	<b>J\$</b>
Pattern Testing	60,000
Acceptance Testing	131,864
<b>TOTAL</b>	<b>191,864</b>

6.15 DSL’s total direct expenses and other fees are shown in Table 6.3 below.

**Table 6.3: DSL Direct Expenses and Other Fees**

<b>Direct Operating Costs</b>			
		<b>Cost Recovery</b>	
<b>Item</b>	<b>2018 Test Year</b>	<b>Full Costs (100%)</b>	<b>Reallocated cost (100%)</b>
Water Treatment Charges	242,931	242,931	242,931
Project Charges	818,208	818,208	818,208
License	61,490	61,490	61,490
Contract Services	-	-	-
Casual Labour	47,500	47,500	47,500
Meter Testing		191,864	191,864
Regulatory Fee		125,000	125,000
<b>Total Direct Costs</b>	<b>1,170,129</b>	<b>1,486,993</b>	<b>1,486,993</b>

**Administrative Expenses**

6.16 DSL’s 2018 audited financials show total administrative costs of \$44.69M. This cost category consists of expenses, such as salaries, wages, rent, insurance, taxes, interest on loans, depreciation, etc. In analysing the administrative costs the OUR observes that:

- DSL was consistent with the treatment of the cost items listed as administrative expenses.
- There is no significant change in administrative costs in the test year relative to the previous year’s expenditures. Hence, there was no need for any regulatory adjustments to the company’s administrative expense.
- Embedded in DSL’s administrative costs are costs associated with the consultancy arm of the company.

6.17 As suggested before, DSL’s administrative costs include expenses incurred by both its regulated and unregulated businesses. Consequently, in keeping with the ratio between these two businesses, 64.5% of the administrative costs were attributed to DSL’s regulated business.

6.18 Table 6.4 below lists DSL’s total administrative costs under the full cost recovery and reallocated cost recovery scenarios.

**Table 6.4 DSL Administrative Costs**

<b>Administrative Costs</b>			
<b>Item</b>	<b>2018 Test Year</b>	<b>Cost Recovery</b>	
		<b>Full Costs (100%)</b>	<b>Reallocated Costs (64.5%)</b>
Salaries, wages and statutory contributions	10,872,659	10,872,659	7,014,937
Directors Remuneration	9,625,000	9,625,000	6,209,959
Rent	1,200,000	1,200,000	774,229
General Insurance	45,000	45,000	29,034
Health Insurance	1,212,339	1,212,339	782,190
Office Expenses and supplies	226,539	226,539	146,161
Motor Vehicle Expense	2,342,379	2,342,379	1,511,281
Staff Training	-	-	-
Staff Welfare	1,224,822	1,224,822	790,244
Utilities	1,004,800	1,004,800	648,288
Security	175,382	175,382	113,155
Interest	818,928	818,928	528,365
Audit Fee	185,000	185,000	119,360
Audit Fee Under Provision	-	-	-
Penalty	15,945	15,945	10,288
Bank Charges	101,027	101,027	65,182
Rates and Taxes	73,100	73,100	47,163
Travelling and entertainment	1,654,665	1,654,665	1,067,574
Stationary and Printing	135,900	135,900	87,681
Miscellaneous expenses	11,358	11,358	7,328
Legal and Professional fees	1,009,200	1,009,200	651,126
Repair and Maintenance	2,491,445	2,491,445	1,607,457
Donation and subscription	163,735	163,735	105,640
Annual Return	5,000	5,000	3,226
Advertising and Promotion	15,000	15,000	9,678
Conference	97,130	97,130	62,667
Interest expense overstated- prior year	-	-	-
Statutory deduction understated-prior year	-	-	-
Withholding taxes	-	-	-
Asset Taxes	200,000	200,000	129,038
<b>Total Administrative Costs</b>	<b>34,906,353</b>	<b>34,906,353</b>	<b>22,521,250</b>

### **Depreciation Expense**

6.19 DSL’s total annual depreciation charge for 2018 was \$9.63M. In keeping with the formula used for the attribution of administrative costs, the same 64.5%:35.5% ratio was used to assign depreciation expenses in the reallocated cost scenario. Accordingly, the total depreciation charge calculated for the Licenced business was \$6.31M.

### **Return on Investment & Rate Base**

6.20 DSL is allowed to recover all prudently incurred costs plus a reasonable return on its investment (ROI). Schedule 3 of the Licence defines the ROI as follows:

*“Return on Investment: This component is calculated based on the approved Rate Base of the Licensee and the required rate of return, which allows the Licensee the*

*opportunity to earn a return sufficient to provide for the requirements of consumers and acquire new investments at competitive costs....”*

- 6.21 The rate base is the approved value of the net investments of the “*Licensed Business*”. Schedule 3 of the Licence further defines the Rate base as follows:

*“...The Rate Base shall be calculated based on the net [water] system investment made by the Licensee at the end of the last financial year for which there are audited accounts, at the time the rates are being set. The Rate Base shall include appropriate rate making investments to take into account known and measureable changes in the plant investment base and shall be increased or reduced by any positive or negative working capital requirement that may exist at such time....”*

- 6.22 Similar to the treatment of DSL’s operating cost, the rate base was calculated for (1) the full cost recovery scenario; and (2) the reallocated cost recovery scenario.

- 6.23 The net rate base derived from DSL’s 2018 balance sheet was \$79.35M. Consequently, the rate base was set at \$79.35M under the full cost recovery scenario. In the case of the reallocated cost recovery scenario, the 64.5% factor was applied to the net rate base, resulting in an applicable rate base of \$51.2 M.

### **Computation of the Weighted Average Cost of Capital (WACC)**

- 6.24 DSL’s Licence stipulates that the allowed rate of return should be derived from the weighted average cost of capital (WACC). Given that DSL’s capital structure consists of both shareholders’ capital and debt, then both of these sources of capital must be taken into account in the calculation of the WACC.

- 6.25 Schedule 3 of the *Licence* further states that:

*“The WACC will be based on the actual capital structure or an appropriately adjusted capital structure which adjustment is required to keep parity of the interests of the consumers and investors and at the time of the filing such capital structure and WACC shall be adjusted by any known and measurable changes which are expected to occur during the test year.”*

### **Cost of Debt**

- 6.26 DSL stated that debt is sourced from various loan facilities, one of which is commercial debt of \$6,298,025 with an interest amount of \$818,928 paid in 2018. The other loan facility, DSL argued, is an interest-free loan for \$13,136,784 from its directors and an associated company. Current liabilities as stated in the audited financials amount to \$13.1M. The notes to the financials states that commercial debt of \$6,298,025 was the only long-term debt and is the sum of two separate loans from Simpson Financing and First Global Bank Limited. The only

loan details provided in the notes were those associated with the loan from First Global Bank Limited. On this basis, the OUR was constrained to compute DSL’s cost of debt by using the interest amount paid on the long-term debt amount of \$6,298,025, which is 13%.

Cost of Equity

6.27 The most widely used and internationally accepted methodology of computing the cost of equity for a company is the Capital Asset Pricing Model (CAPM). Currently, this is the methodology applied by the OUR across the sectors it regulates. For DSL, the OUR used the most recent rate of return on equity (ROE) that was computed in the National Water Commission (NWC) Tariff Determination Notice published in 2019 December. This ROE of 11.34% (real) was deemed an appropriate proxy since NWC is the dominant player in the water and sewerage sectors, and the computation of the NWC’s ROE was based on international best practice.

Weighted Cost of Capital

6.28 In deriving the weighted average cost of capital (WACC) for DSL the determination of the capital structure and the relevant costs are important. The capital structure of the company is reflected in the gearing ratio along with the cost for equity, which is represented by the ROE, and the cost of debt. These components are critical to the WACC computation. The equation for computing the company’s pre-tax WACC is found below:

$$\text{WACC}_{(\text{pre-tax})} = \frac{\text{ROE}}{(1-\text{tax rate}) * (1-\text{Gearing Ratio})} + \text{Interest Rate} * \text{Gearing Ratio}$$

6.29 Based on its audited financials, DSL’s long-term debt accounts for 7.94% of its assets, and 92.06% financed by shareholders’ equity. The cost of DSL’s long-term debt is 13% and the expected return on equity applicable is 13.34%. These parameters result in a pre-tax WACC of 16.69% for DSL.

**Return on Investment**

6.30 Table 6.5 below shows the return on investment for DSL under the ‘full cost recovery’ and the ‘reallocated cost recovery’ scenarios. Based on the analysis, the return on investment that would be applicable to the ‘full cost recovery’ and the ‘reallocated cost recovery’ scenarios are \$13.25M and \$8.55M respectively.

**Table: 6.5 DSL Calculated Rate Base and Return on Investment**

	Test Year	Recovery	
		Full Cost	Reallocated Cost
		100%	64.5%
	\$'	\$'	\$'
Net Fixed Asset	86,939,226	86,939,226	56,093,189
Long Term Asset			
Working Capital	(7,583,815)	(7,583,815)	(4,893,077)
<b>Net Rate Base</b>	<b>79,355,411</b>	<b>79,355,411</b>	<b>51,200,111</b>
<b>Return on Investment</b>		<b>13,245,368</b>	<b>8,545,787</b>
WACC		16.69%	16.69%

### DSL Calculated Revenue Requirement

6.31 Table 6.6 below shows the computation of DSL's revenue requirement and the respective average tariffs under the two cost allocation scenarios.

**Table 6.6 DSL Revenue Requirement Scenarios**

Revenue Requirement and Avg Tariff		
Details	Full Costs (\$)	Reallocated Costs (\$)
Total Direct Operating Costs	1,486,993	1,486,993
Total Administrative Costs	34,906,353	22,521,250
<b>Total Operating Costs</b>	<b>36,393,346</b>	<b>24,008,243</b>
<b>Total Asset Depreciation per annum</b>	<b>9,787,042</b>	<b>6,314,507</b>
Rate Base	79,355,411	51,199,364
WACC		0
<b>Return on investment:</b>	<b>13,245,368</b>	<b>8,545,787</b>
Return on Equity	8,284,708	5,091,812
Gross up for taxes	4,141,732	2,545,524
Interest on Long-Term Debt	818,928	818,928
<b>Total Revenue Requirement</b>	<b>59,425,756</b>	<b>38,868,538</b>
<b>Assume an average sales volume</b>	<b>181,711</b>	<b>181,711</b>
<b>Average Tariff (J\$/'000 Litres)</b>	<b>\$ 327.03</b>	<b>\$ 213.90</b>

6.32 Under the 'full cost recovery' scenario, DSL's average tariff is \$327.03 per 1,000 litres, while it is \$213.90 per 1,000 litres under the 'reallocated cost recovery' scenario. Obviously, to approve the \$327.03 derived under the full cost recovery approach would be incorrect, since

customers would be required to bear additional costs that are not related to the production and supply of the water they consume.

- 6.33 On the other hand, to simply split cost based on the proportion of revenues generated from the water business is to employ a heroic assumption that may not accurately reflect the structure of costs related to DSL's water operation. The reallocated cost approach is problematic since many cost drivers impact the company's administrative costs. Thus, applying only one apportionment ratio to all administrative costs will lead to over and/or under allocation of costs to DSL's Licenced Business. Consequently, there is a risk that the utility might be under or over compensated financially.
- 6.34 In this context, benchmarks based on industry data is important to regulatory decision making. Firstly, industry benchmarks provide insights into the performance of the firm, which reduces the information asymmetry encountered. Secondly, where there is scope for competition it can be an incentive for cost efficiency among firms in an industry. On this basis the OUR took the view that benchmarking DSL's proposed rate against what exists in the industry is the best option available in the absence of detailed cost information.

### **The Benchmarking Approach**

- 6.35 The National Water Commission (NWC) and the Runaway Bay Water Company (RBWC) are the entities that supply water to commercial customers based on tariffs approved by the OUR. Accordingly, both utilities were used in the benchmarking exercise.
- 6.36 The benchmarking analysis in Table 6.7 shows that the rates proposed by DSL are 44% lower than the NWC's for water consumption equal or below 9.1 million litres per month and 4.8% lower for consumption above 9 million litres. Additionally, DSL's proposed rates are 26.7% lower than RBWC's for all levels of consumption.
- 6.37 Given that DSL's proposed rate is lower than that of NWC, in accordance with the "No-Objection Policy"; the Office approves the \$231 per 1,000 litres tariff for commercial customers proposed by DSL.
- 6.38 Further, even though the OUR is aware that DSL currently has no water export customers, the Office approves DSL's proposed water rate of \$330 per 1,000 litres, given that it is lower than NWC's commercial rate for the 0 – 9.1 million per month customer block.

**Table 6.7: Rate Comparison between the NWC and DSL**

Rate Block	NWC Rate Current	RBWC Rate Current	DSL Rate Proposed	Rate Difference	
				DSL vs. NWC	DSL. Vs RWBC
Litres	\$/1000 Litres	\$/1000 Litres	\$/1000 Litres	%	%
0-9.1M	416.14	315.06	231.00	-44.5%	-26.7%
Over 9.1M	242.56	315.06	231.00	-4.8%	-26.7%

These rates shall become effective 2020 March 03 and remain in effect for a period of three years. However, DSL shall be required to separate its financial accounts for its water supply business from its other businesses to facilitate more accurate analyses of the tariffs that should be charged to its customers.

**Determination 1:**

- a) The Office approves DSL’s proposed water rates of:
  - i. \$231 per 1,000 litres for water supplied to its commercial customers; and
  - ii. \$330 per 1,000 litres for water supplied to its export customers.
- b) DSL shall submit its annual audited financial statements to the OUR each year no later than three (3) months after the end of its financial year.
- c) Additionally, commencing in 2021, DSL shall keep separate accounts for its regulated water business and for its other business to facilitate the accurate calculation of its tariff.

**Bill Impact of Approved Rates**

6.39 Using the Average Consumption of 1,892 cubic meters, the typical customer will see a 50% increase in its total bill. The details of the bill impact is shown in Table 6.7 below.

**Table 6.7 DSL Bill Impact with OUR Approved Rates**

<b>Bill Impact</b>				
Description	Rates		Bill Change	
	DSL Existing Rates	Approved Rates	J\$	%
Rate per 1000 Litres	\$154.00	\$231.00	\$77.00	50%
Average Consumption ('000 litres)	1,892.82	1,892.82		
Total Bill Amount per Month	\$291,494.73	\$437,242.09	\$145,747.36	50%

## 7. Technical Review

7.1 Subject to the provisions of the Licence, DSL has the obligation to provide a safe, reliable, and efficient supply of potable water to its customers on a non-discriminatory basis pursuant to the OUR Act, other applicable legislation, codes, standards, and prudent utility practice. To satisfy these requirements, it is of necessity that the planning and operation of the water supply system, at a minimum, encompass the following:

- Ongoing assessment of water supply requirements to satisfy aggregate demand in accordance with the prescribed service standards;
- Periodic review of system configuration/capacity to ascertain its capability to maintain safe efficient, and reliable water service operations;
- Maintenance approach that includes periodic inspection and planned maintenance of critical system components to minimize service interruptions;
- Collection and reporting of reliability data to facilitate assessment/monitoring of quality of service performance by the OUR;
- Energy efficiency measures and power supply options, where applicable, to improve system efficiency and flexibility;
- Optimization of system operations to minimize system total operating cost; and
- Cost controls and revenue sufficiency to ensure sustainable operations.

### Overview of DSL Water Supply System

7.2 The DSL's water supply system depicts a simple, practical, technically sound, and energy efficient design configuration, characteristic of water supply infrastructures utilized by some small water service providers (WSPs). The system includes critical components, such as raw water abstraction facilities, water treatment, distribution network, and metering devices. These facilities are described below.

### Water Source, Abstraction and Production

7.3 The raw water source to DSL's water supply system is the Dairy Spring (Shaw Park, St. Ann), which is sustained by groundwater storage in the White River (St. Ann) limestone aquifer, at elevation of 57m - 61m above sea level. Based on these hydrological/geographic features, water is discharged into the Dairy Spring at almost a constant flow rate of 4,500m<sup>3</sup>/day. However, according to the WRA's Licence, DSL is restricted to a maximum abstraction rate of 3,406m<sup>3</sup>/day, to ensure environmental water flows of 1,100m<sup>3</sup>/day, downstream of the water diversion point for the DSL.

7.4 Based on the system's design/operational characteristics, the water is abstracted by means of gravity diversion via reinforced concrete entombment, which channels water to two (2) distribution pipelines.

## Water Treatment

- 7.5 Water treatment at the facility is achieved through a chlorination process, in which, chlorine gas is injected into the water to achieve the residual chlorine value and water quality standards stipulated by the Licence. Verification of water quality is done by testing of water samples collected at designated sampling points within the system.

## Water Distribution Network

- 7.6 Based on the network's layout, treated water is gravity-fed into the distribution pipeline network, which supplies DSL's customers in the service area. According to DSL, water flow, water pressure and other technical parameters in the network are monitored on a daily basis.

## Electric Power Supply

- 7.7 Based on the existing system's configuration, the sequential flow of water through the entire system, starting from the raw water intake facility, to distribution and supply to customers, is entirely supported by gravity feed. As such, the overall electrical power requirements for the system is relatively low. Notably, this input is mainly required for water treatment and safety equipment. However, given the requirement to maintain acceptable water quality and to meet applicable safety standards, DSL has deployed adequate back-up/standby power supply for these critical facilities as part of its risk mitigation strategy.

## Water Demand and Supply Capacity

- 7.8 Based on DSL's performance data, the total water production, consumption, and non-revenue water (NRW) for 2018 are given in the water balance presented in Table 7.1 below.

**Table 7.1: DSL's Water Balance based on 2018 performance**

DSL 2018 Water Balance			
Category	Water Volume (m <sup>3</sup> )	Proportion	Remarks
Revenue Water	181,711	96%	
NRW	7,411	4%	
Production	189,122	100%	Maximum achievable annual production – 1,243,190 (m <sup>3</sup> )

- 7.9 As indicated, the current water production level accounts for approximately 15% of the achievable maximum annual water production based on the maximum abstraction rate (3406 m<sup>3</sup>/day) stipulated by the WRA Licence. This suggests that the system has sufficient capacity to satisfy the existing and future water demand requirements with adequate margins.
- 7.10 With respect to NRW, the reported level of 4% of annual production is characteristically low for a system that has been in operation for a number of years. However, the specific causes of the water losses were not indicated by DSL.
- 7.11 It should be noted that NRW mainly involves water losses, which is comprised of two major components: apparent losses and real losses. Apparent losses relate to unauthorised water consumption, metering inaccuracies, billing & accounting errors. If not addressed, these

losses can become problematic, consequently depriving the utility of revenues and distorting data on customer consumption patterns. On the other hand, real losses are physical water losses (mainly leakages) in the distribution network, which can severely affect the utility's operations with significant cost implications.

### **Management and Operations Approach**

7.12 DSL's approach for the management and operation of the system appears to be reasonable and generally representative of similar approaches utilized by private WSP's for the management and operation of small water supply systems.

### **Performance Requirements**

7.13 In compliance with Schedule 2 of the Licence, DSL is required to submit to the Office on an annual basis, the following technical information and reports:

- a) Volume of water produced;
- b) Volume of water sold;
- c) Assessment of unaccounted-for-water (UFW);
- d) Consumption per customer category;
- e) Details of any unserved demand;
- f) Water quality reports;
- g) Schedules of maintenance programme;
- h) Reliability of supply report for relevant period detailing:
  - Number of planned interruptions;
  - Percentage of planned interruptions where the required 24-hour period of Notice is not adhered to;
  - Number of unplanned interruptions; and
  - Percentage of unplanned interruptions not restored in the required 24-hour period.

7.14 Based on the nature of the operations, this information is crucial for regulatory assessment and monitoring of overall system performance as well as the level of service delivered to customers.

### **Regulatory Review and Monitoring Framework**

7.15 The regulatory requirements for ongoing assessment/monitoring of DSL's quality of service performance and utility operations are delineated in the sections below.

### **Technical Reports**

7.16 To supplement the stipulated reporting requirements and enhance the monitoring of DSL's utility operations, as well as its key performance indicators (KPIs), the company shall submit to the OUR, the following technical reports:

- Quarterly “Technical Reports” covering the parameters/indicators set out under Schedule 2 of the Licence, prior to the submission of the full annual reports; and
- Any other technical data/reports related to the system that the Office might consider necessary, from time to time.

### **Service Standards**

7.17 Based on the system’s design configuration and technical/operating specifications, it is expected that service delivery will meet or exceed the stipulated standards and conditions, and this should be manifested in the service quality experienced by individual customers. Although the prescribed service standards have defined thresholds, DSL as the service provider is required to ensure that they are appropriately quantified, documented and communicated to the customers. Notably, it is important to recognize that without appropriate levels of service, the planning and operation of the system may not achieve the defined objectives.

#### Service Standards Components:

7.18 The water service standards to be observed by DSL mainly entails the following components.

#### Availability and Reliability of Supply

7.19 This component relates to the availability and continuity of water services to all customers connected to the water supply system and is considered a key factor for assessment of overall system reliability and service delivery performance. It involves frequency, duration, and severity of water supply interruptions (planned and unplanned), as well as daily water demand/capacity dynamics, and other relevant indicators.

7.20 Although DSL has a relatively small and predominantly commercial customer base, the company still has the obligation to provide all customers in the service area (both existing and future customers), with full access to water services at acceptable levels of reliability.

7.21 Given the existing technical/operating characteristics and DSL’s proposed management and operations approach, the system is expected to operate within the functional specifications to deliver safe, efficient, adequate and reliable water service to the customers over the term of the Licence. In this regard, it is recommended that DSL develop a Framework/Action Plan, encompassing among other things, requirements pertaining to system planning, operations, maintenance of facilities, and assessment of risks to the system.

#### Water Quality

7.22 This aspect covers conditions such as microbiological parameters, turbidity, colour, PH, etc., which should be addressed in the water treatment process, in accordance with the Licence, relevant health & safety standards/regulations, prudent utility practice, and international best practices. It is important to note that contamination of drinking water constitutes a major burden on human health; therefore, interventions to improve its quality can provide significant

benefits to society. Given this imperative, DSL shall supply potable water at acceptable quality, consistent with the minimum water quality standards prescribed under Schedule 2 of the Licence, for long-term consumption. While these are minimum requirements, DSL should endeavour to maintain potable water quality at the highest possible level.

7.23 With respect to the reporting of water quality, to supplement the annual water quality reports, DSL shall submit quarterly water quality reports to the OUR for ongoing monitoring of the relevant parameters. The company shall also ensure that the water quality test results and other relevant water quality information are accessible to customers, on an ongoing basis.

#### Water Pressure

7.24 In accordance with the requirements of the Licence, DSL shall ensure that the pressure of the water supplied to customers is maintained in the range of 20 - 60 PSI. Based on observation, the “monitoring & control unit” for the system appears to be equipped with the necessary components to measure, record and monitor this parameter. On that basis, DSL shall report all measurements of water pressure in the network, in the quarterly Technical Reports to be submitted to the OUR.

#### Planned and Unplanned Interruptions

7.25 As set out under Schedule 2 of the Licence, DSL shall keep records of all planned and unplanned water service interruptions detailing: dates, times, affected area, number of affected customers and notices provided to them. This information is necessary to facilitate system reliability and operational assessments. The service standard also requires DSL to:

- Provide notification time for at least 90% of planned interruptions.
- Restore at least 90% of unplanned interruptions of water supply within the time communicated to customers.

7.26 This service quality information should be included in the quarterly Technical Reports to be submitted to the OUR.

#### **Revenue Metering**

7.27 DSL shall ensure that all revenue-type water meters to be installed at customers’ service connections within the service area are in conformance with the requirements of the Licence and the MTAOP. With respect to the existing metering devices, DSL shall submit to the OUR, the following information requirements within one (1) month of the effective date of this Determination Notice.

- 1) Listing of all water meters installed at customers’ service connection in MS Excel format, which shall include:
  - a) The meter type
  - b) The meter manufacturer’s serial number
  - c) DSL’s assigned meter number

- d) Meter installation date
- e) The meter location/service address
- f) Customer/premises number
- g) Copies of any related Pattern Approvals and Acceptance documents

2) A description of DSL's water meter procurement process.

### **System Operation**

7.28 The characterization of a water utility as a private water supply provider, as in the case of DSL, should provide ample signals to the company to employ prudent strategies to ensure the optimization of system operations at all times. This approach should effectively minimize total operating costs, while realizing improvements in operational efficiency and performance. In that context, DSL's proposed approach for the long-term management and operation of the water supply system appears to be representative and reasonable. Notwithstanding, to limit or eliminate the potential for system degradation over time, DSL is required to develop appropriate policies and procedures for prudent operation of the system, including critical equipment and facilities. These procedures shall be included in the requested Framework/Action Plan.

### **Maintenance**

7.29 As set out under section 8 of the Licence, DSL shall maintain and keep in good repair all equipment used in carrying out the "Licensed Business", in accordance with the legal and regulatory framework. Prudent industry practice also supports the development and adherence to maintenance policies/procedures that will assure efficient, reliable and cost-effective water infrastructure operations.

7.30 Taking into account these conditions, DSL shall develop an overall Maintenance Plan for the water supply infrastructure, for three (3) years in advance. The plan shall take into account the original equipment manufacturers' (OEM's) recommendations for equipment maintenance and statutory maintenance requirements where applicable, and shall be reviewed annually and updated as necessary. The company shall submit the Maintenance Plan to the OUR, three (3) months after the effective date of this Determination Notice. Thereafter, the updated plan shall be submitted to the OUR in January of each year, for the remaining period of the Licence.

### **Risk Management**

7.31 The OUR's technical review found that DSL has contemplated strategies to respond to system contingencies and exceptional circumstances, including the following conditions:

- Forced outage of critical system facilities and equipment;
- Chlorination plant failure;
- Power supply failure;
- Disruption to raw water inflows
- Raw water contamination.

7.32 Moreover, it appears that some mitigation measures have already been incorporated in the system’s design. Notwithstanding, given the potential consequences of risk conditions on the operation of the system, it is recommended that DSL shall develop a strategy/model to assess and mitigate potential risks to the system, on an ongoing basis.

### Summary of Regulatory Requirements

7.33 The regulatory requirements to be addressed by DSL are summarized in Table 7.2 below.

**Table 7.2: Regulatory Requirements to be addressed by DSL**

Regulatory Requirements to be addressed by DSL		
Index	Aspect	Items to be submitted to the OUR
1	Technical Reports	<ul style="list-style-type: none"> <li>i. Quarterly “Technical Reports” covering the parameters/requirements set out under Schedule 2 of the Licence, prior to the submission of the full Annual Reports; and</li> <li>ii. Any other technical data/reports related to the system that the Office might consider necessary, from time to time.</li> </ul>
2	Availability and Reliability of Supply	<ul style="list-style-type: none"> <li>i. It is recommended that DSL develop a Framework/Action Plan, encompassing among other things, requirements pertaining to the planning, operations and maintenance of the facility. This will contribute to the availability and reliability of service.</li> </ul>
3	Water Quality	<ul style="list-style-type: none"> <li>i. Quarterly and annual water quality reports.</li> </ul>
4	Water Pressure	<ul style="list-style-type: none"> <li>i. Reporting of water pressure measurements in the Quarterly Technical Reports</li> </ul>
5	Planned and Unplanned Interruptions	<ul style="list-style-type: none"> <li>i. Service quality performance information, which shall be included in the Quarterly Technical Reports.</li> </ul>
6	Revenue Metering	<ul style="list-style-type: none"> <li>i. Listing of all water meters installed at customers’ service connections in MS Excel format, which shall include:               <ul style="list-style-type: none"> <li>a) The meter type</li> <li>b) The meter manufacturer’s serial number</li> <li>c) DSL’s assigned meter number</li> <li>d) Meter installation date</li> <li>e) The meter location/service address</li> <li>f) Customer/premises number</li> <li>g) Copies of any related Pattern Approvals and Acceptance documents.</li> </ul> </li> <li>ii. A description of DSL’s water meter procurement process.</li> <li>iii. This information shall be submitted to the OUR within one (1) month of the effective date of this Determination Notice.</li> </ul>
7	System Operation	<ul style="list-style-type: none"> <li>i. Operating policies and procedures for prudent operation of the system, including critical equipment and facilities, which shall be submitted to the OUR within three (3) months of the effective date of this Determination.</li> </ul>
8	Maintenance	<ul style="list-style-type: none"> <li>i. An overall Maintenance Plan for the water supply infrastructure, for three (3) years in advance. The plan shall take into account the original equipment manufacturers’ (OEM) recommendations for maintenance of plant/equipment and incorporate statutory maintenance requirements where applicable, and shall be reviewed annually and updated as necessary. The company shall submit the plan to the OUR, within three (3) months after the effective date of this Determination Notice.</li> <li>ii. Thereafter, the updated Maintenance Plan shall be submitted to the OUR in January of each year, for the remaining period of the Licence.</li> </ul>
9	Risk Management	<ul style="list-style-type: none"> <li>i. It is recommended that DSL develop a strategy/model to assess and mitigate potential risks to the system.</li> </ul>

**Determination 2:**

1. DSL shall submit to the OUR :
  - a. Quarterly “Technical Reports” covering the parameters and requirements set out under Schedule 2 of the Licence, no later than one (1) month after the end of each quarter.
  - b. Quarterly and annual reports on the quality of water supplied to its customers, no later than one (1) month after the end of each quarter.
  
2. Additionally, DSL shall submit to the OUR within three (3) months of the effective date of this Determination:
  - a. Its operating policies and procedures for prudent operation of the system, including critical equipment and facilities. Its overall Maintenance Plan for the water supply infrastructure, for the next three (3) years, which it should update annually.

## 8. Public Consultation

- 8.1 The OUR, in keeping with its practice and mandate, conducted a public consultation with customers of DSL in light of the water service provider's tariff submission. The public consultation, which was held on Monday, 2019 October 14, provided an avenue through which DSL customers were made aware of their service provider's requests and for the OUR to receive DSL's customers' comments on the rate application as well as their quality of service experience.
- 8.2 In its presentation, DSL advised that the tariff application contained a request for a 50% increase on current rates. They advised that this increase is necessary, as it had expended about \$150 million to carry out improvement works on the water supply system. DSL argued that the company would therefore need to recoup some of the amount spent, in addition to having the resources needed to maintain the system to ensure that service is provided, at least, at the prescribed levels.
- 8.3 In their general remarks, DSL's customers advised that they had no complaints about the level of service delivery, as they do not experience service interruptions. Additionally, they offered commendations to the provider for the high quality of customer service they provided. The concerns expressed were specific to the tariff application.

### **HIGHLIGHTS OF CUSTOMERS' CONCERNS:**

#### *Adverse impact of proposed rate increase*

- 8.4 The main concern raised by customers related to the adverse impact that the proposed 50% rate increase would have on their business operations. Customers expressed that while they understood the basis for the requested increase, they asked if this increase could be applied on a phased basis, for example, over a period of two years.

#### *DSL's RESPONSE*

- 8.5 In response, DSL advised that it could not accommodate a phased application of the requested increase at this time. DSL pointed out that over the past eight (8) years; its customers had been billed at rates that are lower than the cost to operate the water supply system. As such, a request to apply the requested rate increase on a phased basis was not in keeping with the company's outlook.

#### *Increase in Customer Base*

- 8.6 Customers enquired whether DSL had explored the option of increasing its customer base, which includes providing service to residential customers as well.

#### *DSL's Response*

- 8.7 DSL advised that the option to expand its customer base was explored with the relevant request being made to the responsible Ministry. However, the request was denied and the matter was before the courts.

Efficiency checks on DSL operations

- 8.8 Customers queried whether, as part of its deliberations, the OUR would carry out efficiency assessments of DSL's operations to ensure that costs associated with inefficiencies are not included in any rate determination.

OUR's Response

- 8.9 The OUR assured customers that it would analyse DSL's proposed operational costs which would be benchmarked against other comparable utility providers. Customers were also advised that the OUR's tariff review process involves an analysis of DSL's audited financial statements to ensure that only prudently incurred costs are passed on in the rates charged to customers.

Timeline to complete tariff review

- 8.10 DSL's customers also enquired about the timeline within which the OUR would make its decision on the tariff submission.

OUR's Response

- 8.11 Customers were advised that the OUR's review process normally takes ninety (90) days, from the time the application was accepted, to complete.

## 9. Quality of Service Standards and Performance Criteria

- 9.1 The OUR has noted the positive feedback from DSL customers regarding the level and quality of service that is being delivered. In its effort to ensure that a high standard of service delivery is maintained, the OUR has developed quality of service standards to be complied with by DSL.
- 9.2 The quality of service standards established for DSL comprises the Overall Standards and the Guaranteed Standards. The Overall Standards represent several general performance targets to be met by DSL; however, it will not result in compensatory payments being made to customers where the targets are not met. However, DSL will be required to submit quarterly reports on its performance against these targets. As part of this tariff review, and in keeping with its right to introduce additional or vary the service standards from time to time, the OUR has reviewed the Overall Standards as set out in Schedule 2 of the Licence. Based on this review, all the Overall Standards will continue to be applicable, except for Overall Standard D, “Planned and Unplanned Interruptions”. The changes effected are intended to add specificity to the timeline for advance notices given for planned interruptions of service.
- 9.3 Overall Standards D shall be replaced as follows:

### *D. Planned and Unplanned Interruptions*

At least 24 hours’ notice shall be given for at least ninety percent (90%) of planned service interruptions.

At least ninety percent (90%) of unplanned service interruptions should be restored within the time communicated by DSL to customers. DSL shall keep records of all planned and unplanned interruptions detailing: dates, times, affected area, number of affected customers and notice provided to them.

- 9.4 The Guaranteed Standards prescribe service levels such as Service Connection, Billing, Complaint Investigation, Metering, Disconnection, Reconnection and Compensation Payment, to be met by DSL. Any failure by DSL to adhere to any individual Guaranteed Standard can result in compensatory payment to the affected customer. In keeping with its power to introduce additional or vary the Guaranteed Standards from time to time, the OUR has reviewed the Guaranteed Standards as set out in Schedule 2 of the Licence. These Guaranteed Standards are now substantially restated, but some refinements have been made to a few of the Guaranteed Standards to improve clarity in the description of the particular Guaranteed Standard. The Guaranteed Standards to be met by DSL, are outlined in Table 9.1 below:

**Table 9.1: Guaranteed Standards**

<b>Code</b>	<b>Guaranteed Standard</b>	<b>Mode of Compensation</b>
<b>GS1 – Connection of New Customers</b>	DSL is required to connect all new customers with working meters, where water supply is available at the property boundary, within three (3) working days after signing the contract for connection.	Automatic
<b>GS2 – Issue of First Bill</b>	DSL must issue (print and mail/deliver) a bill to a customer based on a meter reading within thirty (30) working days after the account is opened.	Claim
<b>GS3(a) – Response to complaints - Acknowledgements</b>	DSL must acknowledge written customer complaints within three (3) working days of receipt.	Claim
<b>GS3(b) – Response to Complaints - Investigations</b>	DSL must, within fifteen (15) working days of receipt of a complaint, complete the investigation and inform the customer of the results.	Claim
<b>GS3(c) – Investigations involving 3<sup>rd</sup> party</b>	DSL must, within thirty (30) working days, complete investigations into a complaint involving a 3 <sup>rd</sup> party.	Claim
<b>GS4 (a)– Wrongful Disconnection</b>	DSL shall not disconnect the service of an account which is either not in arrears or is the subject of an investigation internally or by the OUR.	Automatic
<b>GS4 (b) – Reconnection after Wrongful Disconnection</b>	DSL must, within twelve (12) hours, reconnect any supply that the company wrongfully disconnected and a written apology extended.	Automatic
<b>GS5 – Repair or Replacement of Faulty Meter</b>	DSL must, within ten (10) working days after detection or after being informed of a meter defect, repair or replace any malfunctioning meter.	Automatic
<b>GS6 – Meter Readings</b>	DSL must render a bill based on a meter reading each month.	Automatic

Code	Guaranteed Standard	Mode of Compensation
<b>GS7 – Reconnection after Payment of Overdue Amount</b>	DSL must, within twenty-four (24) hours of receipt of all applicable payments (reconnection fee etc.), reconnect customers disconnected for any outstanding balance.	Automatic
<b>GS8 – Payment of Compensation</b>	<p>DSL must credit customers’ accounts within one (1) billing period after a breach of any of the prescribed Guaranteed Standards.</p> <p>For the avoidance of doubt, if DSL does not compensate the customer within the specified time, this results in another breach. Where applicable, customer must submit claims within one hundred and twenty (120) days after the breach.</p>	Automatic

**Determination 3:**

The Office has determined that DSL shall:

- a) adhere to the revised Overall Standard D as specified in paragraph 9.3 above, the Guaranteed Standards stipulated Tables 9.1 and all the other standards in its Licences and service contracts.
- b) within thirty (30) working days of the end of the reporting period, submit quarterly reports to the Office on its performance against the Guaranteed Standards . These reports shall indicate the number of breaches committed against each standard and the potential and actual payout for each breach.

**Guaranteed Standards Compensation**

9.5 As is currently represented in Schedule 2 of the Licence, the Office confirms that the compensation mechanism for a breach of a Guaranteed Standard shall include “Claim” and “Automatic Compensation” as the prescribed modes of compensation. In the case of breaches that shall be compensated by way of a claim, such claims shall be made by submission of a written claim by or on behalf of the affected customer on a claim form to be developed by DSL and approved by the OUR (the “GS claim form”). Customers must submit claims within one hundred and twenty (120) days after the date of the occurrence of the breach.

- 9.6 DSL will be required to, within three (3) months of the effective date of this Determination Notice, develop its GS claim form for submission and approval of the OUR. Following approval, DSL will be required to make the claim forms accessible to its customers, such as placing the forms on the company's website. In the interim, while DSL is developing its GS claim form, its customers shall be permitted to make claims for breaches of the Guaranteed Standards for which the mode of compensation is not automatic, by submitting claims in writing to DSL within one hundred and twenty (120) days after the date of the occurrence of the breach.
- 9.7 In Schedule 2 of the Licence, the compensation for a breach of the Guaranteed Standard is to be "*equivalent to the reconnection fee and for 'Wrongful Disconnection', one and a half times the reconnection fee*". However, there is currently no reconnection fee determined for DSL. Notwithstanding this, for the compensation mechanism to become fully operational, there is a need for the establishment of the applicable compensatory payments. As such, the Office has derived the compensation for a breach of the Guaranteed Standards by using a discounted NWC Guaranteed Standard compensation methodology for commercial customers as its basis.
- 9.8 For the NWC, the Guaranteed Standard compensation is calculated at four (4) times the applicable service charge. The *National Water Commission Interim Tariff Review 2019-2021 Determination Notice* indicates that the service charge for a commercial customer using a 1 inch /25 mm meter is \$2,442; which results in a compensation amount of \$9,768. Giving regard to the size and customer base of DSL when compared to the NWC, the Office applied a 50% discount to the NWC's Guaranteed Standard compensation for its commercial customer but rounded up the figure to the nearest thousand. Accordingly, the Office determined that the compensation for a breach of the Guaranteed Standard for DSL is \$5,000 (that is \$9,736/2, rounded to the nearest thousand).
- 9.9 Giving consideration to the Licence provisions for calculating the compensation for *Wrongful Disconnection*, the Office has applied the one and a half times to the \$5,000 determined for a breach of the Guaranteed Standard. The Office has also assessed the adverse impact of *Reconnection after Wrongful Disconnection and Reconnection after Payment of Overdue Amounts* and has determined that it would be very similar to the service being wrongfully disconnected. In all three instances, the customer would be without water and such circumstance would not be the result of any action or inaction of the customer. Accordingly, the Office has determined that the compensation for a breach of *Wrongful Disconnection, Reconnection after Wrongful Disconnection and Reconnection after Payment of Overdue Amounts* will attract compensation of \$7,500 (which is 1.5 x \$5,000).

**Determination 4:**

1. The Office has determined that compensation for breach(s) of:
  - a) the Wrongful Disconnection, Reconnection after Wrongful Disconnection and Reconnection after Payment of Overdue Amounts Guaranteed Standards is \$7,500; and
  - b) all other Guaranteed Standards is \$5,000.
2. The Office has also determined that DSL is required to, within three (3) months of the effective date of this Determination Notice, develop its Guaranteed Standards claim form for submission and approval of the OUR.

**Customer Service Charter and Complaints Handling Procedure**

- 9.10 The Office is of the view that some areas of service delivery are more appropriately addressed through the development of policies. In light of this, the Office takes the view that DSL's service to its customers could be enhanced by way of a policy that clearly communicates its commitment to doing business with consumers. Accordingly, within three (3) months of this Determination Notice, DSL must develop and submit to the OUR for approval, a Customer Service Charter outlining its service delivery commitments, customers' rights and responsibilities, emergency procedures and contact details. This Charter must also detail the activities and timelines in its Complaints Handling Procedure.

**Determination 5:**

The Office has determined that DSL is required, within three (3) months of this Determination Notice, to develop and submit to the OUR for approval a Customer Service Charter.