
Office of Utilities Regulation

Can-Cara Development Limited

Review of Water Rates

Determination Notice



OFFICE OF UTILITIES REGULATION

December 22, 2006

DOCUMENT TITLE AND APPROVAL PAGE

Can-Cara Development Limited – Review of Water Rates
Determination Notice
Document No. WAT 2006/03

Office of Utilities Regulation

DOCUMENT NUMBER: WAT 2006/03

DOCUMENT TITLE: Can Cara Development Limited – Review of Water Rates, Determination Notice

1. PURPOSE OF DOCUMENT

Sets out the Office's determination on Can-Cara's water rate application.

RECORD OF REVISIONS

Revision Number	Description	Date
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APPROVAL

This document is approved by the Office of Utilities Regulation and becomes effective on **January 1, 2007**.

On behalf of the Office:



J. Paul Morgan
Director General

December 22, 2006

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Chapter 1: Executive Summary

- 1.1 Can-Cara Development Limited is a private company that is licensed to provide water and sewerage service to Western Spanish Town. The company obtained a 20-year water supply licence from the Minister on 29th April 2005. The company also has a sewerage services Licence issued on June 16th 2004.
- 1.2 The company also has 5 year licences from Water Resources Authority (WRA) permitting the extraction of a maximum of 4,341 cubic metres (m³) per day from two well sources at Innswood and Bernard Lodge, St. Catherine.
- 1.3 A condition of the water service provider licence requires that the company submit a tariff application to the Office of Utilities Regulation (hereinafter called “the Office”). The company requested a tariff review on 16th February 2006.
- 1.4 At the time of the sewerage rates determination (December 23rd 2005) carried out under the terms of the sewerage services licence, the company had stated that it wished to have similar rates for water and sewerage. At that time, the Office indicated that in considering the water rates, it would take into consideration the common costs and synergies from both business units.
- 1.5 Subsequent to this, Can-Cara requested that the water rates be considered independent of the sewerage rates. The company’s proposal is outlined in Table 2.
- 1.7 A critical part of any rate application process is public consultation with residents in the designated service area. The Office held two (2) public hearings to obtain the views and concerns of the customers and has taken these into consideration in the determination of the water rates.
- 1.8 The Office has also recognized that some resources are shared between the two business units, and has also factored these into the calculation of the rates. This has resulted in an adjustment to the previously determined sewerage rates.
- 1.9 The Office also found it necessary to make several adjustments to the operating and capital costs, as well as the capital structure of the company to arrive at the water rates. The summary of the rates that have been determined by the Office for both water and sewerage is provided at Table 1.

1.10 **Table 1: Office determined water and sewerage rates**

Consumption Bands (gallons)	Office determined water rates (\$/1000 gls)	Office determined sewerage rates (\$/1000 gls)
0-3000	130	110
Next 3,000	210	160
Next 6,000	290	280
Over 12,000	420	480
Service charge	-	150
Connection fee	\$1,500 ¹	-
Initial Deposit	\$1,500	-
Reconnection fee	\$1,500	-

- 1.11 In addition to these rates, the Office has approved a reconnection fee of \$1,500 and an initial deposit of \$1,500. A connection fee of \$1,500 is applicable to customers that have switched providers.
- 1.12 The rates are set for a period of three (3) years, and Can-Cara is required to submit the first 2 years of audited financial and operating information prior to the next review. The Office will also develop an indexation mechanism for the rates as outlined in table 1. However, the development of this mechanism will be conditioned on the receipt of the first year of audited financial information from the company. The indexation mechanism, if developed, will be applied to rates in the two (2) subsequent years.
- 1.13 Can-Cara's water supply licence provides for several quality of service standards – classified as Overall and Guaranteed Standards. The Overall Standards are general in nature and the performance of the company against these standards will be taken into consideration at rate reviews. The Guaranteed Standards address specific areas of service delivery in the relationship between the company and its customer, and attract a compensatory payment, equivalent to \$1,000, for any breach. The compensatory payments will be made on the basis of the results of investigations by the company into claims made by the customer. Should a customer be dissatisfied by the handling or treatment of a claim there is always the right of appeal to the Office.

¹ This fee is only applicable to customers that have switched providers.

Chapter 2: Introduction

- 2.1 Can-Cara Development Limited (hereinafter called “Can-Cara”) is a privately owned company providing sewerage services to the Western Spanish Town Area. The Minister issued the company with a water supply licence on 29th April 2005, following a recommendation by the Office².
- 2.2 The duration of the water supply licence is 20 years and Can-Cara is required to commence negotiations with the Office at the beginning of the 17th year of operation if it intends to renew the licence. There are also several conditions pertaining to expected operational performance, reporting requirements and delivery of service. The service area as specified in the licence is Western Spanish Town and includes several housing developments including Spanish Village, Innswood Village, Ardenne Park, Sugar Corporation of Jamaica Housing Development, White Water Meadows II and Magil Palms. The total number of lots estimated from these schemes is 3,134.
- 2.3 Can-Cara has been issued with licences by the WRA to extract water from two sources: Rio Cobre Well located at Innswood, St. Catherine and Lime Walk Well at Bernard Lodge, St. Catherine. Total amount of water that can be extracted from these two sources is 4,341 cubic metres (m³) per day.
- 2.4 Pursuant to the provisions of both the water and sewerage licences, Can-Cara is required to apply to the Office for approval of water and sewerage rates. Can-Cara initially stated that it would apply for both rates in September 2004, but revisited this position in July 2005. At that time, the company indicated a preference for the Office to process the sewerage application rates as the state of development of this aspect of the business was advanced. The Office issued a determination on the sewerage rates on the 23rd December 2005³. The Office was however mindful that given the integration of Can-Cara’s operations, there would be instances of shared overheads between the two business units. The Office indicated that it would make the necessary adjustments in the sewerage rates to reflect the impact of any common costs when the water tariffs were being considered.
- 2.5 During the sewerage rate public consultations, Can-Cara indicated that it would apply for water rates in January 2006.

² Can-Cara also obtained a sewerage service provider licence on 16th June 2004.

³ Copy of determination *Can-Cara Development Limited, Review of Sewerage Rates – Determination Notice*: Document No. WAT 2005/02 is available on the OUR’s website at www.our.org.jm or at the OUR’s Information Centre.

Chapter 3: Can-Cara's Proposal

Rates

- 3.1 Can-Cara submitted two (2) rate proposals on February 16th, 2006.
- It was proposed that water be billed at the same rate as sewerage
 - It was also proposed that water rates be considered independent of sewerage rates.
- 3.2 Although the company did not specify its rate preference, in the accompanying financial model, a unified rate for water and sewerage (proposal 1) was used to determine the projected revenues of the business. The rates proposed is an increasing block structure and consisting of 4 consumption bands.
- 3.3 In addition to the variable charge, a service charge of \$150 is proposed. Table 2 outlines Can-Cara's proposal. The rates as outlined are for water rates. The Office also noted that similar rates were also proposed for sewerage.

Table 2: Can-Cara Proposed Water Rates and Charges

Consumption bands	Rate per 1000 gals (\$)	% age of customer base
First 1000 (fixed rate, includes svc fee)	362.51	100
Next 1000 (2000)	362.51	100
Next 1000 (3000)	362.51	88
Next 1000 (4000)	605.40	70
Next 1000 (5000)	605.40	55
Next 1000 (6000)	605.40	20
Next 1000 (7000)	1,011.01	12
Next 1000 (8000)	1,011.01	10
Next 1000 (9000)	1,011.01	5
Next 3000 (9001-12,000)	1,011.01	2
Next 3000 (12,001-15,000)	1,688.39	1
Next 4000 (15001-20,000)	1,688.39	0.1
Over 20,000	1,688.39	0
Service Charge (incorporated in sewerage rates)	-	-
Meter charge	\$50	-
Deposit	\$1,500	-
Connection fee	\$2,100	-
Reconnection fee	\$1,500	-

- 3.4 Can-Cara incorporated an annual escalation factor of 11% escalation to both water (and sewerage) rates and assumes a yearly collection rate of 85%.

- 3.5 Additionally, a meter charge of \$50 is proposed as well as physical connection fee of \$2,100. Customers are also required to make a deposit of \$1,500 before receiving the water service.

Customer base

- 3.6 Can-Cara expects to provide service to 1,350 customers in the initial year of operation and expects this amount to gradually increase over an 8-year period eventually stabilizing at 5,000 customers. A similar customer profile was used for sewerage services. Table 3 outlines the growth in customer base.

Table 3: Demand Schedule

No. of customers		
Year	Additional	Cumulative
1	1350	1350
2	1500	2850
3	700	3550
4	500	4050
5	300	4350
6	300	4650
7	300	4950
8	50	5000
Total	5000	

Proposed Capital Expenditure

- 3.7 The proposed capital investment for the water aspect of the business is \$104.15M, of which, \$89.7M will be used to construct the water system. Can-Cara states that the total capital outlay will be financed with 100% equity. Table 4 outlines the breakout of the proposed capital expenditure.

Table 4: Capital Costs

Asset	Amount (\$)	Amount (\$)	Useful lives
Well Source #1			
Supply and Install 5,100m of 10" pipeline and reinstate road	22,950,000	-	-
Supply and install 850m of 8" pipeline and reinstate road	3,400,000	-	-
Supply and install 730m of 8" pipeline and reinstate road	2,920,000	-	-
Water tank including site preparation and access road	2,500,000	-	-
Chlorinators	300,000	-	-
Professional fees	3,000,000	-	-
Well Source #2			
Testing (water quality and pump test)	1,000,000	-	-
Chlorinator	300,000	-	-
Connecting line- 350m	1,592,000	-	-
Well Source #3⁴			
Supply and install 7,122m of 8" pipeline and reinstate road	28,788,000	-	-
Chlorinator	300,000	-	-
Total Construction cost		89,700,000⁵	20
Motor vehicles	-	7,800,000	10
Pumps and electrical	-	4,000,000	5
Standby generator	-	2,500,000	10
Meters	-	9,700,000	10
Fixtures and fittings	-	150,000	10
Total		113,850,000	-

Proposed Operating Expenditure

3.8 Can-Cara projects that it will incur \$29.9M in operating expenses during the first year to provide the water service. Table 5 details the total expenditure.

⁴ There is no WRA approval on file for this well source. Can-Cara explained that because several companies have expressed an interested in obtaining this well source, it has yet to receive the relevant approvals.

⁵ This amount represents the total value of assets transferred from Magil Palms to Can-Cara. Magil Palms is the developer of the subdivision, and agreed to transfer all assets to Can-Cara, who will then assume the responsibility of being the water service provider for the area

Table 5: Proposed Water Related Operating Expense

Item	Amount (\$)
Operation and Maintenance Contract	12,500,000
Other Administrative cost	1,520,000
Salaries and related expenses	7,828,571
Health and Statutory deductions	1,722,286
Depreciation	6,330,000
Total Expenses	29,900,857

Chapter 4: Public Hearing

- 4.1 The Office met with the residents of Magil Palms at their Citizens Association meeting on March 12th 2006 to discuss the water rate application. However, shortly after the hearing commenced, the attendees indicated that they were more interested in discussing the outstanding issue of how Can-Cara, which was also their housing developer, would honour its obligations to provide the basic amenities as stated in the house sale agreement. The Office made several attempts to get meaningful comments from the attendees but realized that this was not possible and decided to abort the meeting.
- 4.2 Another complaint of the attendees was that they were unaware that the National Water Commission was not going to be their water service provider. This was a strongly held point despite the fact that the Office had advertised Can Cara's application for licences and afforded interested parties an opportunity to comment. *The Office has taken note of this expressed concern and has subsequently revised its licence application process to include consultation with potential customers and not to rely solely on the expectation of responses to the advertisements.*
- 4.3 Given the importance of the public consultation, the Office decided to circulate pamphlets detailing Can-Cara's rate application to each household in the hope of receiving individual comments. These comments are summarized as follows.

Concerns raised by the Residents

- 4.4 The primary issue of discontent conveyed by the residents was the lack of choice they faced in terms of a supplier of the commodity. Concerns were expressed on Can-Cara's ability to deliver a satisfactory service, especially in areas such as continuity of supply, water quality and customer service.

Consumers' Reaction to the Rates Proposed by Can-Cara

- 4.5 In general, the residents are of the opinion that the rates proposed by Can-Cara are too high. The operators of the Company were portrayed as being dishonest as the proposed rates were not consistent with those which were discussed at a meeting the Company held with the residents. The residents were also concerned that the rates were much higher than those in effect for the NWC. It is their view that the rates charged by NWC should be used as a benchmark in deciding a reasonable rate for Can-Cara.
- 4.6 Table 6 summarizes the rates recommended by the residents of Magil Palms.

Table 6: Rates Recommended by Citizens

Usage		Can-Cara Rates	Citizens' Recommendations
For up to 1,000 gallons		\$362.51	\$150
For next 2,000 gallons	Per 1,000 gallons	\$362.51	\$150
For the next 3,000 gallons	Per 1,000 gallons	\$605.40	\$300
For the next 4,000 gallons	Per 1,000 gallons	\$1,011.01	\$350
For the next 3,000 gallons		\$1,688.39	\$500
For the next 3,000 gallons		\$1,688.39	\$500
For the next 4,000 gallons		\$1,688.39	\$500
Over 20,000 gallons		\$1,688.39	\$500

Guaranteed Standards

4.7 The Office is of the view that utility companies in general have primary responsibility of ensuring that consumers are provided with an acceptable level of service, and for compensation to be given to customers who receive poor service. Consequently, several Guaranteed Standards were proposed to form a part of the tariff regime. Although the areas selected for monitoring are similar to those already in place for NWC, they however have more rigid performance measures for compliance. This is not unreasonable as Can-Cara being a much smaller Company and with new infrastructure than the NWC, should be able to meet the proposed service standards within the specified timeframe.

4.8 Table 7 represents the collective responses from the residents of Magil Palms on the proposed Guaranteed Standards:

Table 7: Comments on Proposed Guaranteed Standards

Code	Guarantee	Residents' Comments
GS1 – Connection of New Customers	Can-Cara is required to connect all new customers where water supply is available at the property boundary, within 5 working days after signing the contract for connection	In Agreement with standard proposed
GS2 – Issue of First Bill	Can-Cara must issue (print and mail/deliver) a bill to a customer based on a meter reading within 30 working days after connection.	In Agreement with standard proposed
GS3 – Response to complaints	Can-Cara must, within 3 working days acknowledge customer complaints after receipt. Can-Cara must, within 15 working days of receipt of complaint, complete investigation and inform the customer of the results.	<ol style="list-style-type: none"> 1. Acknowledge within 2 working days. 2. Complete investigations within 5 working days.
GS4 – Wrongful Disconnection	Can-Cara must, within 12 hours of wrongful disconnection reconnect the customer, and a written apology extended.	In Agreement with standard proposed
GS5 – Repair or Replacement of faulty meters	Can-Cara must, within 10 working days, repair or replace any meter it confirms to be functioning outside the tolerances of commercial accuracy.	Repair/Replacement should occur within 5 working days.
GS6 – Meter Reading	Can-Cara must render a bill based on a meter reading each month.	In Agreement with standard proposed
GS7 – Reconnection after Payment of overdue amts.	Can-Cara must, within 24 hours of receipt of all applicable payments (reconnection fee etc.) reconnect customers disconnected for debt.	In Agreement with standard proposed
GS8 – Payment of Compensation	Can-Cara must, within 20 working days of breach claim, process and make payment or inform customer that claim is denied (and upon what basis)	Should be processed within 10 working days

4.9 As it relates to the method of claim for breach of the standard, majority supported individual claiming as opposed to an automatic credit by the Company. There was also the request for a ‘grace period’ of approximately 15 days before disconnection of the supply.

Office’s Comment

4.10 The Office will give due consideration to the willingness of customers to pay for the service, as summarized in Table 6, in the determination of the water rates for the various consumption bands.

- 4.11 As it relates to a grace period before disconnection, the OUR cannot prescribe a regime that prevents the company from disconnecting a supply at anytime if a balance remains after the due date of a bill. Any additional time given to customers for payment is at the discretion of the Company.
- 4.12 The Office's decision on the guaranteed standards is contained in chapter 7.

Chapter 5: Office's Evaluation of the Submission

Revenue Requirement

5.1 Given that there is no historical information on Can-Cara's operation, the Office, in determining the rates, must make reasonable projections on the total operating costs, inclusive of depreciation charges, taxes and calculate a reasonable return on the company's investment. The rates that are determined must be sufficient to cover the sum of these individual costs.

5.2 Operating Costs

5.2.1 Can-Cara has projected that its operating costs will be \$29.9M. The bulk of expenses come from O&M contract of \$12.5M, salaries of \$7.8M and depreciation of \$6.33M.

- **Salaries**

5.2.2 The company has stated that it will need an additional 5 persons⁶ to provide support to the water operations. This will result in an amount of \$7.5M for salaries.

5.2.3 There was some inconsistency in the amount specified for salaries. In the financial model \$7.8M is specified whilst in other supporting information an amount of \$7.5M is used. Additionally, Can-Cara stated that it will split the human resources on a 50/50 basis across its water and sewerage business and this includes the services of the Managing Director. Wage related expenses associated with the Managing Director have already been fully included in the determination of the sewerage rates. If the Office were to include the \$3M provision for this position in deriving the total salaries, it would result in double counting.

5.2.4 In addition to the Managing Director, several other persons (8) will share services with both businesses. Salaries related to this group, which have been included in total wage related cost in the determination of the sewerage rates, is \$11.656M. Given that these resources are shared equally, the allocation to the salaries for water is \$5.828M. Likewise, total operating costs for sewerage will be reduced by \$5.828M. In addition to these shared resources, the Office has also made provision for a water engineer and a technician. This results in total wages of \$9.328M. Statutory deductions related to this amount is \$1.07M.

⁶ This number comprises a managing director, water engineer, technologist and 2 technicians.

- **Operation and Maintenance Contract**

5.2.4 Provision of \$12.5M was made in the tariff submission to cover operation and maintenance (O&M) contracts. O&M contracts entail IT system maintenance and software, bill collection, chlorine, lab testing, security, electricity charges and office stationery. The Office has noted that \$1M allocation for contingency has been included. The company could not provide a satisfactory explanation of what this provision for contingency included; as such this amount has been excluded. Can-Cara had earlier stated that the cost per bill payment transaction is \$21. If this is applied to the total number of customers, the total amount that should be allocated to bill collection agencies is \$340,200. This is less than \$600,000 included in the O&M contract. The Office has therefore reduced the amount to reflect this. Computer software is an asset and should be capitalized instead of expensed; consequently, the Office has reduced the O&M expense by \$3.2M and has added it to assets. The software is to be depreciated over a 3 year period. The amount for O&M contracts included in the total operating cost is \$7.7M.

- **Depreciation**

5.2.5 Can-Cara has included provision for depreciation of \$6.33M in its tariff submission. The Office has, however, made an adjustment to this amount to include depreciation associated with meters and computer software and excluded the value of assets that were transferred from Magil Palms to Can-Cara.

5.2.6 Can-Cara estimates that the total cost of 1,350 meters is \$9.7M. However, the Office has adjusted this amount downwards to \$7.9M⁷. With a useful life of 10 years, the associated depreciation charge is \$790,000.

5.2.7 Computer software was depreciated based on a useful life of 3 years. With a capitalized value of \$3.2M, the associated depreciation charge is \$1.06M.

5.2.8 The useful life for pumps and electrical has also been adjusted to 20 years (from 10 years) – this being the normal provision for this type of equipment, resulting in a downward adjustment in this assets depreciation provision to \$390,000.

5.2.10 Of the total asset value of \$113.85M that Can-Cara has submitted, \$89.7M represents the value of assets transferred from Magil Palms to the company. Can-Cara has calculated depreciation associated with these assets at \$4.5M. The Office, however, considers these assets as ‘customer owned assets’, as such the depreciation charges will be offset by an equivalent amortization of the value of the assets. Therefore, the Office has not included this charge in determining the depreciation.

⁷ Price per meter is \$5,850 instead of \$6,815. This is applied to total of 1,350 customers. Price was obtained from average price paid by similar small water operators.

- 5.2.11 The revised amount for depreciation expense is \$3.3M. This amount is included in the total operating costs.
- 5.2.12 **The total operating cost as determined by the Office is \$22.6M.** The detail is shown in Table 8.

Table 8: Summary of OUR determined operating expense

Item	Can-Cara proposal	OUR projection
Operation and Maintenance Contract	12,500,000	7,712,200
Other Administrative cost	1,520,000	1,395,000
Regulatory fees	-	125,000
Salaries and related expenses	7,828,571	9,328,000
Statutory deductions and health	1,722,286	1,247,720
Depreciation	6,330,000	3,296,417
Total Expenses	29,900,857	22,604,337

5.3 Capital Costs

- 5.3.1 Can-Cara has stated that the capital costs associated with the provision of water service is \$113.85M (see table 4). However, \$89.7M of this amount was transferred from Magil Palms to the company. The Office has assumed that the cost of the assets transferred were included in the sale price of the houses, consequently, these assets will not attract a rate of return.
- 5.3.2 With further adjustments to reflect the addition of computer software (\$3.2M) and reductions in the provisions for the water meters, the total asset base that will attract a return on capital is \$25.4M.

5.4 Return on Asset Base

- 5.4.1 According to Can-Cara, the investment in the water business will be wholly financed by equity. A business that is wholly financed by equity exposes the consumers to higher charges when compared to companies that are financed by a combination of debt and equity. The Office will therefore benchmark a debt to equity ratio of 55:45 to determine the weighted average cost of capital (WACC). In the sewerage application, an interest rate of 12% was used. With this interest rate, a combination of both debt and equity will result in a lower cost of capital than if only cost of equity is used.
- 5.4.2 The Office calculated the WACC and applied it to the capital cost of \$25.4M to obtain the return on asset base.

- 5.4.3 The Office had previously determined a post tax cost of equity of 14.6% for Can-Cara⁸. With a cost of debt of 12%, the calculated post tax WACC is 11%. **The resulting pre-tax return on capital is \$4.2M⁹.**
- 5.4.4 Revenue requirement is derived from the summation of operating costs and return on asset base as described above. The Office has determined that the **total revenue requirement is \$26.5M (see table 9)**. The rates that will be determined must cover this amount.

Table 9: Revenue Requirement

Category	Amount (\$M)
Total operating cost	22.5
Taxes ¹⁰	-
Pre-tax return on capital	4.2
Total	26.7

⁸ See *Can-Cara Development Limited, Review of Sewerage Rates – Determination Notice*: Document No. WAT 2005/02 is available on the OUR's website at www.our.org.jm or at the OUR's Information Centre.

⁹ The pre-tax WACC is 16%. This is applied to asset base of \$25.4M to derive the return on capital.

¹⁰ Taxes have already been accounted for in the calculation of return on capital.

Chapter 6: Determination

6.1 Connection fees

6.1.1 Can-Cara has proposed a connection fee of \$2,100 for new customers to connect to its water system. The company states that this amount represents an estimate of the cost of labour for plumbers, transportation and additional material to facilitate the proper installation of meters. However, these developments are serviced lots and should already have the necessary infrastructure in place to provide water service. Furthermore, prior to the acquisition by Can-Cara, Magil Palms (the developers) were providing the customers with water service. The Office has therefore disallowed the proposed connection fee of \$2,100 for customers that were receiving service from Magil Palms.

6.1.2 The Office is aware that there are some customers in the designated service area that are being provided with service from another water provider. In the event that these customers switch providers, and Can-Cara becomes their service provider, then a connection fee of \$1,500 becomes applicable. The Office is of the view that this is sufficient to cover all the necessary costs involved in facilitating the connection.

6.1.3 *Determination 1*

Where a connection, inclusive of meters, has already been provided by the developer, a connection fee is not applicable.

Customers that were receiving water service from Magil Palms shall not pay a water connection fee.

A water connection fee of \$1,500 is applicable to new customers

6.2 Meter Charge

6.2.1 Can-Cara has proposed a monthly meter charge of \$50 for its water customers. The company has stated that this charge is intended to recover costs over the life of the meter. The Office has already made a provision for depreciation of the meters in determining the total operating cost, so if this charge were to be approved, it would result in double counting. The Office does not consider it appropriate to have a meter charge, as such, the \$50 is disallowed.

6.2.2 *Determination 2*

The proposed meter charge of \$50 is not allowed.

6.3 Initial Deposit

6.3.1 Can-Cara has proposed a security deposit of \$1,500 to cover contractors charge if reconnection fee is not paid by the customer within two (2) months of disconnection. It is a common practice amongst utility service providers to require that customers make a deposit at the commencement of the supply agreement. This is done to reduce the amount of bad debt if a customer's account is disconnected and/or terminated for non-payment. Some existing utility service providers require that new customers make a deposit ranging from \$1,500 to \$3,500¹¹ for residential customers. The Office does not object to the principle of requiring customers to make a deposit prior to the commencement of service. Can-Cara has proposed an initial deposit of \$1,500. The Office has no objection to this amount.

6.3.2 *Determination 3*
Initial deposit of \$1,500 is approved.

6.4 Reconnection fee

6.4.1 Can-Cara has proposed a reconnection fee equivalent to the security deposit of \$1,500 before a reconnection is effected. The Office does not object to this charge.

6.4.2 *Determination 4*
Reconnection fee of \$1,500 is approved. This amount should be paid prior to the reconnection of a service that had been disconnected for outstanding debt.

Rate structure

6.5 In Can-Cara's submission, a fixed charge was not proposed as it assumed that all customers to whom it provides sewerage service will also be provided with water. Given that these sewerage customers will pay fixed monthly charge of \$150, there was no need to apply a fixed charge twice. It however proposed a fixed meter charge of \$50 per month, but the Office has disallowed this amount as there is already provision in the accounts for depreciation relating to meters.

6.6 The volumetric rates, as a direct function of the amount of water consumed, were also proposed and are outlined in Table 2. These rates patterned an increasing block rate structure and spreads across four (4) consumption bands. In the determination of these water rates, the Office will satisfy itself that sufficient revenue will be generated to offset the revenue requirement of \$26.7M.

6.7 The Office will adopt the approach used in the determination of the block structure for sewerage for the development of the water rates. The rates will be

¹¹ This amount can increase if customers' average consumption over a specific time period has increased and the account is disconnected for non-payment.

- determined in accordance with a 4 block structure, with rates increasing for each 3,000 gallons of consumption up to 12,000 gallons, after which, a uniform rate is charged for any consumption over 12,000 gallons. The lower band is the lifeline rate and the top rate is designed to discourage excessive consumption.
- 6.8 Can-Cara's water rate application did not indicate the duration over which it wanted the rates to be fixed, but the Office has decided that, given the integrated nature of the water and sewerage business, it will use a similar time period for review of water as sewerage. As such the rates contained herein are presumed to be for a period of 3 years. As a precondition to undertaking a review of the rates at the end of this 3 year period, Can-Cara is required to submit audited financial statements and operating information to the Office for the first 2 years of operation.
- 6.9 The Office has adopted the approach to link rates to an index to allow for movements in external variables that affect the daily operational cost of the business over the period for which the rates are set. Because no actual costs are available, the Office will consider the development and introduction of this index after Can-Cara submits the first year audited financial statements and it is satisfied that there is sufficient information available to support the analysis that would be involved. The indexation mechanism, if developed, will be applied to rates in the two (2) subsequent years.
- 6.10 Can-Cara also requested that the water rates be considered independent of sewerage rates; as such there will be different rates for water and sewerage rates. However, given that several resources are shared across these two business units, the Office has made downward adjustments in the operating expenses of the sewerage business to reflect this. Consequently, the sewerage rates have also been revised as outlined in Table 11. Table 10 contains the water rates.

Table 10: Office determined water rates and charges

Consumption Bands (gallons)	Office determined rates (\$/1000 gls)	%age of accounts billed	Total projected revenues (\$)
0-3000	130	100	14,066,520
Next 3,000	210	49	9,482,760
Next 6,000	290	11	4,076,820
Over 12,000	420	3	3,220,560
Connection fee	\$1,500 ¹²	-	-
Initial Deposit	\$1,500	-	2,025,000¹³
Reconnection fee	\$1,500	-	-

Table 11: Revised Sewerage Rates and Charges

Consumption bands (gallons)	Office determined rates (\$/1,000 gallons of water consumed)
0-3,000	110
Next 3,000	160
Next 6,000	280
Over 12,000	480
Service charge	150

Projected Revenues

6.12 With the rates for each of the consumption band in Table 10, it is projected that the total revenue from operation will be \$30.8M. As with the determination of the sewerage rates, the first income statement is inadequate to assess the long-term viability of the business. The revenues stream is a projection and may vary depending on changes in variables such as the number of customers. A more appropriate approach is to conduct a long term cash flow analyses of the business. The 10-year projected cash flow is then discounted to present value using the pre-tax WACC and compared to the company's initial outlay to determine the net

¹² This fee is only applicable to customers that have switched providers.

¹³ Revenues from initial deposit are not included as part of overall company's revenue. This is considered a prepayment, should be placed in a separate account and returned to customers upon the termination of service.

present value¹⁴. This approach was also used, as the company has no actual operating and financial data, and it will be impossible for the Office to determine the success or failure of the company based on only one year of projected data. The results showed an IRR of 22% which is greater than the pre-tax WACC of 16%.

¹⁴ Internal rate of return (IRR) can also be used. This would give the same result, in terms of acceptance of project, as the NPV method. The IRR is rate that equates the cash flow to the initial outlay, that is, NPV of zero. It should be higher than the WACC to accept a project.

Chapter 7: Performance Benchmarks

7.1 Can-Cara's licence contains several reporting requirements and quality of service standards which forms a part of its licence conditions. These are reproduced below and will form part of the criteria used to assess the company's annual performance.

7.2 Reporting Requirements

Can-Cara is required to submit audited financial and operating information on its operation on a yearly basis. Can-Cara shall submit two (2) years of financial and operating information prior to a review of its water rates.

7.3 Quality of Service Standards

7.3.1 The licence contains several overall and guaranteed standards. The overall standards are general in nature and address overall delivery of service. Guaranteed standards address specific areas of service, and Can-Cara shall be obliged to make compensatory payments equivalent to the service charge if any of these standards are breached. Compensatory payments are to be made after Can-Cara has completed its investigation and it concludes that it is in breach of the guaranteed standards. Customers have the right to appeal Can-Cara's decision on these claims to the Office.

7.3.2 The standards prescribed in the licence are:

7.3.2.1 Overall Standard

1. Water Quality - at least 95% of water samples must be collected from water production sources for testing
 - At least 95% of water samples must be negative with coliform bacteria
 - The level of residual chlorine should be about 0.5mg/l and present in at least 95% of samples
 - Any other standards imposed by the Ministry of Health from time to time
2. Environmental Standards – The licensee shall conform to all and any standards that may be established by NEPA.
3. Water Pressure – the company shall ensure that the pressure of water to customers is in the range 20-60 per square inch (psi), and take all reasonable steps to ensure that customers receive an adequate supply of water at all times.
4. Water supply - required notification time should be given for at least 90% of planned interruptions. At least 90% of emergency lock-offs should be restored within the required time.

7.3.2.2 **Guaranteed Standard**

In addition to the overall standards contained in the licence, the Office has also made a determination on the guaranteed standards. Details of these standards are contained in Table 12.

Table 12: Office Determined Guaranteed Standards

Code	Office Decision
GS1 – Connection of New Customers	Can-Cara is required to connect all new customers where water supply is available at the property boundary, within 3 working days after signing the contract for connection
GS2 – Issue of First Bill	Can-Cara must issue (print and mail/deliver) a bill to a customer based on a meter reading within 30 working days after connection.
GS3 – Response to complaints	Can-Cara must, within 3 working days acknowledge customer complaints after receipt. Can-Cara must, within 10 working days of receipt of complaint, complete investigation and inform the customer of the results.
GS4 – Wrongful Disconnection	Can-Cara must, within 12 hours, reconnect any supply that the company inadvertently disconnected and a written apology extended.
GS5 – Repair or Replacement of Faulty Meter	Can-Cara must, within 10 working days, repair or replace any malfunctioning meter.
GS6 – Meter Readings	Can-Cara must render a bill based on a meter reading each month.
GS7 – Reconnection after Payment of Overdue Amount	Can-Cara must, within 24 hours of receipt of all applicable payments (reconnection fee etc.) reconnect customers disconnected for debt.
GS8 – Payment of Compensation	Can-Cara must, within 15 working days of breach claim, process and make payment or inform customer that claim is denied (and upon what basis)

7.3.2.3 Additionally, all new customers after the signing of a contract for service are to be given a copy of the guaranteed standards. Can-Cara should promote the guaranteed standards bi-annually through bill inserts.

7.3.2.4 **Breach of any of the guaranteed standards will attract a penalty equivalent to \$1,000.**

7.4 Codes of Practice

7.4.1 The following Codes are to be developed by the company:

- Within three months of the date of this Determination – “Standard Terms and Conditions of Contract” are to be submitted to the Office for review and approval

- During the first year after the date of this Determination – a series of Customer Service information bulletins advising customers of the company’s procedures for making complaints, bill payment, disconnection policy, contact offices and telephone numbers, etc. This will be regarded as a work in progress during the 12 month period as the Office will expect Can-Cara to eventually produce a Code of Practice for Customer Service.

Chapter 8: Summary of Determination

- 8.1 In summary, the Office has made the following determinations:
- 8.2 The water rates are independent of sewerage rates.
- 8.3 Sewerage rates have been adjusted to reflect the common cost of both water and business units.
- 8.4 The determined water rates follow an increasing block structure with four (4) consumption bands.
- 8.5 Rates are set for a period of 3 years. The Office will develop an appropriate indexation mechanism after the receipt of the first year of audited financial information. This mechanism, if developed, will be applied to the rates in the 2 subsequent years.
- 8.6 The initial deposit fee for water is \$1,500.
- 8.7 Reconnection fee is \$1,500.
- 8.8 There shall be no connection fee for existing customers, with prior service from Magil Palms. A connection fee of \$1,500 is applicable to new customers
- 8.9 The Office requires two (2) years of audited financial and operating information before it will undertake review of the existing rates.
- 8.10 Can-Cara must adhere to overall and guaranteed standards contained in this Determination
- 8.11 Within three (3) months of the date of this determination, Can-Cara shall prepare ‘Standards Terms and Conditions of Contract’ which is to be submitted to the Office for review and approval.
- 8.12 During the first year after the date of this Determination, Can-Cara is to develop a series of Customer Service information bulletins advising customers of the company’s procedures for making complaints, bill payment, disconnection policy, contact offices and telephone numbers etc.
- 8.13 **The rates become effective on January 1st 2007 and will remain effective for 3 years.**

Appendix 1a: Summary of Overall Quality of Service Standards

Category	Description
Water Quality	<ul style="list-style-type: none"> - at least 95% of water samples must be collected from water production sources for testing - At least 95% of water samples must be negative with coliform bacteria - The level of residual chlorine should be about 0.5mg/l and present in at least 95% of samples - Any other standards imposed by the Ministry of Health from time to time
Environmental	The licensee shall conform to all and any standards that may be established by NEPA.
Water Pressure	The company shall ensure that the pressure of water to customers is in the range 20-60 per square inch (psi), and take all reasonable steps to ensure that customers receive an adequate supply of water at all times
Water supply	Required notification time should be given for at least 90% of planned interruptions. At least 90% of emergency lock-offs should be restored within the required time.

Appendix 1b: Summary of Guaranteed Quality of Service Standards

Code	Office Decision
GS1 – Connection of New Customers	Can-Cara is required to connect all new customers where water supply is available at the property boundary, within 3 working days after signing the contract for connection
GS2 – Issue of First Bill	Can-Cara must issue (print and mail/deliver) a bill to a customer based on a meter reading within 30 working days after connection.
GS3 – Response to complaints	Can-Cara must, within 3 working days acknowledge customer complaints after receipt. Can-Cara must, within 10 working days of receipt of complaint, complete investigation and inform the customer of the results.
GS4 – Wrongful Disconnection	Can-Cara must, within 12 hours, reconnect any supply that the company inadvertently disconnected, and a written apology extended.
GS5 – Repair or Replacement of Faulty Meter	Can-Cara must, within 10 working days, repair or replace any malfunctioning meter.
GS6 – Meter Readings	Can-Cara must render a bill based on a meter reading each month.
GS7 – Reconnection after Payment of Overdue Amount	Can-Cara must, within 24 hours of receipt of all applicable payments (reconnection fee etc.) reconnect customers disconnected for debt.
GS8 – Payment of Compensation	Can-Cara must, within 15 working days of breach claim, process and make payment or inform customer that claim is denied (and upon what basis)