Water Authority of the Cayman Islands

Operating Agreement for
Sea Water Reverse Osmosis Plant
at North Side Water Works,
Grand Cayman, Cayman Islands

PPC-2019-WAC-004-RFP

PLEASE READ THIS IMPORTANT NOTE

The Tender Documents can be downloaded directly from the Water Authority's website at www.waterauthority.ky .

All companies who obtain a set of the Tender Documents from the above website must immediately acknowledge receipt of these documents by sending an e-mail to ContractReview@waterauthority.ky, and include the company name, company physical address and contact e-mail address.

This acknowledgement is essential in order to be able to provide potential tenderers with Tender Addenda when issued.

For additional information contact ContractReview@waterauthority.ky

Water Authority of the Cayman Islands

Operating Agreement for
Sea Water Reverse Osmosis Plant
at North Side Water Works,
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Tender Documents

Tender Issue Date: 10 January 2019

Tender Closing Date & Time: 27 February 2019 (12:00 pm (noon))

INDEX

INTRODUCTION TO TENDER

The Water Authority of the Cayman Islands (the "Authority") seeks a Company to operate and maintain its largest Sea Water Reverse Osmosis (SWRO) plant which is designed to process potable water from sea water.

The SWRO plant is located at the Authority's North Side Water Works at Botanic Road, Frank Sound Grand Cayman, Cayman Islands, Block 58A, Parcel 100, property owned by the Authority.

The SWRO plant, individually known as the North Side SWRO Plant, has a water production capacity of 9,000 cubic metres per day (2.4 million US gallons per day).

The SWRO plant incorporates all pre-treatment and post-treatment necessary to achieve the standards laid down in this Agreement. This includes all monitoring and recording equipment necessary to determine the current condition and operational states of all parts of the plant including quality of the product and reject water. The SWRO plant consists of:

(a) An electricity-driven SWRO plant, including isobaric energy recovery devices and a computer-based control system, including all civil engineering works and ancillary erections.
(b) A building sized to house all equipment required for the water production capacity, with clearances between and around the equipment to facilitate maintenance.
(c) Feed water abstraction wells, feed water pumps, controls and associated civil engineering works
(d) A brine disposal well to dispose of all brine produced by the plant, as well as the scrubber blow-down, other side streams generated by the desalination process, and the flow from the floor drains in the plant building.
(e) All pumps, controls and civil engineering works to transfer the product water from the plant to the Authority's water storage tanks. The system is designed to allow the flow of product water from the plant to be stopped by the Authority without prior notice and without causing any adverse effects to the plant.
(f) An air stripping tower and wet gas scrubber to remove hydrogen sulphide from the product water and the process air stream respectively.
(g) A waste water dump system, monitored and controlled by conductivity and pH sensors, to divert the product water to the brine disposal well whenever the quality of the product water does not meet the specified quality.
(h) A septic tank and disposal well to receive all waste water from the washroom.

The SWRO plant is designed in such a way that the water production capacity is achieved by two (2) independent RO trains (except for the feedwater pumps and wells, brine disposal well and post-treatment system (i.e., air stripping tower and wet gas scrubber) which are common to both trains).

The plant has been designed to operate unattended, with automatic notification (i.e., using auto-dialler equipment) to on-call operating personnel in the event of failure of the plant. Unattended operation includes the automatic shut-down of the plant immediately following the occurrence of major operating problems, such as pipe breakages, malfunctioning of the air stripper and/or wet gas scrubber, or other problems which result in one or more of the constituents of the product water significantly exceeding the acceptable values.

The SWRO plant includes an emergency generator sized to operate one (1) RO train, including all requisite pumps, controls, building lights, air-conditioning etc. The emergency generator is equipped with a manual transfer switch, and a fuel storage tank (of double-wall design) with adequate capacity to provide at least 72 hours supply. The generator fuel storage system (tank, piping, and accessories) complies with NFPA 30 and NFPA 37.

Under the Agreement the Contractor will be required to satisfy the demand for water as determined by the Authority up to the limit of the design water production capacity of 9,000 cubic metres per day (2.4 million US gallons per day) of the SWRO plant. The Contractor must supply to the Authority in any one month an average daily quantity of Water of up to 8,100 cubic metres per day, which is 90% of the specified design capacity of the SWRO plant.

The North Side SWRO Plant is very important to the Authority's overall water operations. The SWRO plant represents nearly 40% of the total installed water production capacity for the Authority. Consequently, the SWRO plant must continue to produce water reliably in order to satisfy the overall demand for potable water.

Historical Water Production

Year	North Side SWRO Plant (m^3/day)	Total (*)
2014	3,722.0	41.4%
2015	3,490.3	38.8%
2016	3,615.1	40.2%
2017	3,795.1	42.2%
2018	4,533.3	50.4%

(*) as percentage of installed water production capacity for North Side SWRO Plant

Under the Agreement the Contractor will be responsible to operate and maintain the SWRO plant for a period of seven years and keep all plant equipment, instrumentation, processes, facilities, systems, and utilities in good condition and working order. These services must be performed in a professional, efficient, and economical manner, in accordance with all terms, conditions, requirements, specifications, attachments, and drawings contained in this Tender document or incorporated by reference.

Overall operations and maintenance shall be based on the following key objectives:

a) Meeting of product water production goals and performance warranties;
b) Protection and preservation of the plant equipment and structures in good working order such that all equipment and other assets achieve their design lives;
c) Maximization of operational efficiency;
d) Protection of the health and safety of the operating and Authority staff; and
e) Protection of the environment.

The quality of the product water produced shall be within the maximum permissible levels as set out in Appendix D of these Tender Documents.

The Authority will be responsible for the post-treatment (e.g., disinfection, corrosion inhibition, and pH stabilization) and for the distribution of the water from the Authority's water storage tanks.

Under the Agreement the Authority will pay a fixed amount (adjusted annually for inflation) each month to cover the Contractor's overheads, in addition to a fee (adjusted annually for inflation) and an energy fee for each cubic metre of water produced.

The returned Tenders shall be evaluated on the basis of the cost of the produced water, the experience of the Tenderers, and the ability of the eligible companies to operate and maintain the SWRO plant.

Transition

In order to ensure a smooth transition, the Contractor shall work alongside the existing Plant operator to become familiar with the general operation, maintenance and management of the Plant. This familiarization process will be for a period of up to four (4) weeks prior to the Commencement Date.

Immediately prior to the Commencement Date, the Authority shall, together with the Contractor, read the CUC electricity meters for the Plant as well as the totalizing flow (water) meters to establish base line data for the Agreement.

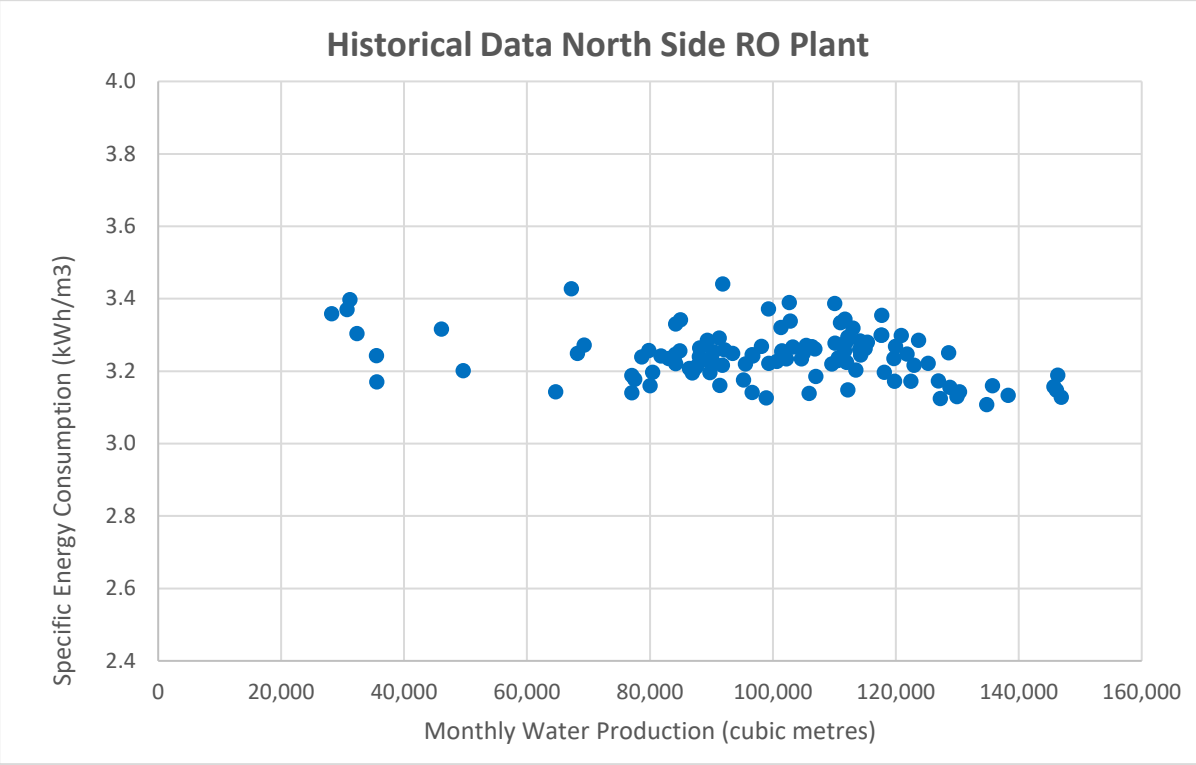
ADDITIONAL INFORMATION

This plant was originally commissioned in June 2009 with a design production capacity of 9,000 cubic metres per day.

The initial Performance Test was performed on 4 June 2009: The recorded water production over a 24-hour period averaged 379.9 m^3/hr, with a specific energy consumption of 3.33 kWh/m^3.

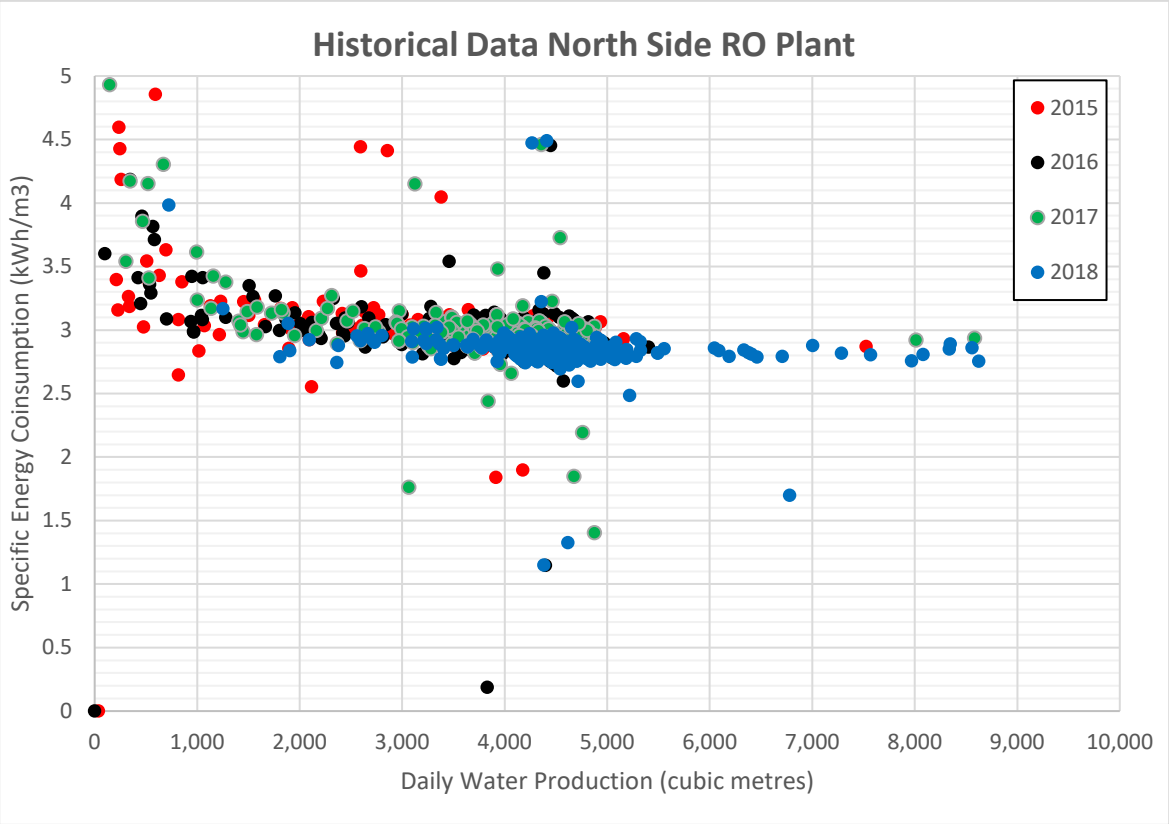
The plant has consistently produced water at or below the Specific Energy Consumption Guarantee of the Plant (3.61 kWh/m^3),

The table below indicates the Specific Energy Consumption (kWh/m^3) of the plant since August 2009, based on the monthly billing (each data point represents a calendar month).



The most recent Performance Test was performed on 10 October 2018: The recorded water production over a 6-hour period averaged 375.8 m3/hr, with a specific energy consumption of 3.19 kWh/m3. Product water pH, Electrical Conductivity, and hydrogen sulphide concentrations during this Performance Test averaged 6.46 units, 328.3 µS/cm and 11.1 µg/l respectively.

The table below indicates the actual Specific Energy Consumption (kWh/m^3) of the plant for each day water was produced over the last four (4) years (each data point represents a calendar day).



This plant currently has DOW FilmTec SW30HRLE-400i membranes, which were installed in early 2009.

Within the first year of the Agreement the Contractor must replace the Dual Work Exchanger Energy Recovery (DWEER™) system with Energy Recovery Inc. (ERI) isobaric energy recovery devices, which have better reliability and operational simplicity. The Contractor shall submit details of the required modifications to the Plant for review by the Authority. In his design the Contractor shall properly consider the different requirements of the ERI PX units compared to those of the DWEER™ system, and how this could affect other portions of the Plant:

- ERI PX units require more “push” on the Low Pressure side, which may require feed water well pumps with a higher discharge head.
- ERI PX energy recovery devices have increased mixing of the Brine and Feed streams which results in an increase in the salinity of the Feed water to the membrane elements.

All costs associated with these modifications shall be included in the Contractor’s rates.

INSTRUCTIONS FOR TENDERING

Introduction

1. These instructions for Tendering are to be used as a guide to Tendering for this project. Failure to comply with any of these Instructions may result in the rejection of the Tender.

Eligibility Criteria

2. Tenderers shall meet the following eligibility criteria in order to be considered and evaluated:
   a. Companies must provide confirmation that they have sought independent legal and any other appropriate advice on all applicable local laws and regulations relating to carrying on business in the Cayman Islands and that if their tender is accepted, and they are awarded the Contract, they will be in a position to comply with all such local laws and regulations as soon as is reasonably possible on being notified that the Tender has been accepted.
   b. Companies must satisfy all insurance, financial, and bonding requirements as specified in the Tender Documents.
   c. Companies must provide the Past Performance Data described in paragraph 14(a) below. Prior experience with SWRO plants using (saline groundwater containing hydrogen sulphide) feed water wells rather than sea water intakes will be an advantage. Clearly identify and describe these SWRO plants and the company's involvement. The ability of a company to show an operational plant under an agreement, similar to this one, will be advantageous.
   d. Companies must provide the Corporate Information described in paragraph 14(b) below. Please note that all intended principals that will be employed full-time on Grand Cayman to oversee and manage the operations for a minimum of the first three (3) years of the contract shall have an Engineering degree and at least seven (7) years' experience operating and maintaining SWRO plants with isobaric energy recovery systems.
   e. Companies must have a representative attend the Pre-Tender Conference (see paragraphs 9 and 10 below).
   f. Companies must submit their Tender in accordance with these Tender Instructions by no later than the end of business on Wednesday 27 February 2019 (Close Date). See paragraphs 19-20 below.
   g. The Tender must contain the mandatory items of the Tender Evaluation Criteria stated at paragraph 29 below.

Relevant Documents

3. Tenderers shall study all the "Tender Documents" comprising the Introduction to Tender, Instructions for Tendering, Form of Tender, Contract Agreement, Conditions of Contract, Appendices to the Agreement, and Contract Drawings. The whole of the Tender Documents shall be read and their true intent and meaning ascertained before the Form of Tender is completed. The Water Authority shall not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of the Tender Documents.

4. Except in so far as may be directed by the Water Authority in writing neither the Water Authority, nor any agent or servant in their employment has any authority to make any representation or explanation to Tenderers as to the meaning of these Tender Documents, or as to anything to be done or not to be done, or as to these instructions, or as to any other thing or matter, so as to bind the Water Authority as to the execution of these proposals.

5. Should any alteration or addition to the Tender Documents be deemed necessary prior to the date for submission of Tenders, these shall be issued by e-mail to Tenderers by the Director of the Water Authority in the form of a Tender Addendum.

6. If a Tenderer is in doubt about the meaning or intent of any item in the Tender Documents it shall notify the Director of the Water Authority by e-mail (to ContractReview@waterauthority.ky) not later than fifteen (15) days before the tender submission date stated in paragraph 19 below. Interpretations or clarifications considered necessary by the Water Authority in response to such questions shall be issued by the Director of the Water Authority in the form of a Tender Addendum to all Tenderers.

   The Water Authority may also issue Tender Addenda to modify the Tender Documents as deemed advisable.

   Each Tender Addendum shall have a serial number and Tenderers shall acknowledge receipt of each Tender Addendum by e-mail to ContractReview@waterauthority.ky . Failure to acknowledge receipt may result in a Tender being rejected. All Tender Addenda so issued shall become a part of the Tender Documents.

   Only questions answered by Tender Addenda will be binding. Oral statements and other interpretations or clarifications may not be relied upon and will not be binding or legally effective.

7. Tenderers shall treat the Tender Documents and all details contained therein as private and confidential.

Electronic Data Room

8. An Electronic Data Room will be available from the date of the issue of the Tender Documents to allow registered potential Tenderers to view (design, equipment and historical operating) data related to the SWRO Plants. Tenderers should contact the Authority to arrange access to the Electronic Data Room.

   The Authority has attempted to provide, in good faith and with due diligence, all and any information that it considers to be relevant for the purpose of this Tender. However, the Authority makes no representation or warranty as to the completeness or accuracy of the information contained in the Electronic Data Room. The information provided is to be considered by the Tenderer as just one of many sources of information, and on the condition that the Tenderer will make its own determination as to the suitability of the information provided for the purpose of preparing its Tender.

Mandatory Pre-Tender Conference

9. A mandatory Pre-Tender Conference will be held at the Water Authority offices, 13G Red Gate Road, George Town, Grand Cayman on Tuesday 5 February 2019, commencing at 9:00 a.m. A mandatory tour of the SWRO plant covered by this Tender will be conducted at the beginning of the Pre-Tender Conference.

   The Pre-Tender Conference is intended to provide prospective Tenderers with adequate information to prepare tenders. Representatives of the Water Authority will be present to discuss the project and clarify any queries arising from the Tender Documents. All Tenderers are required to attend the conference.

   In order to make the Pre-Tender Conference as productive as possible, Tenderers are requested to submit any questions in writing, by e-mail, at least five working days in advance of the Pre-Tender Conference to: ContractReview@waterauthority.ky .

The Water Authority will transmit to registered potential Tenderers such Tender Addenda as it considers necessary in response to questions/queries submitted prior to or arising during the Pre-Tender Conference, without identifying the source of the original question/query. Oral statements may not be relied upon and will not be binding or legally effective.

10. A Tender will **not** be accepted from a Tenderer that did not have a representative at the Pre-Tender Conference.

Rates to be Entered

11. All items in the Appendix to the Form of Tender shall either be priced or alternatively the word "included" should be entered. If neither of these two alternatives are adopted the Tenderer shall be held to have included for any such item left blank in his other prices in the Appendix to the Form of Tender.

12. The prices to be inserted in the Appendix to the Form of Tender are to be the full inclusive value of the work described in the Tender Documents, including all costs and expenses which may be required in and for the work described, together with all general risks, liabilities and obligations set forth or implied in the Tender Documents.

Preparing Tender

13. Tenderers who submit a Tender shall be held to have by their own independent observations and enquiries fully informed and satisfied themselves as to the condition of the SWRO plant, any Laws and Regulations that may affect cost and performance of the Agreement, and all other points which can in any way affect the Tender. The submission of a Tender will constitute an incontrovertible representation by the Tenderer that they have complied with every requirement of these Instructions for Tendering.

14. The Tender shall be clear and concise and shall include sufficient detail for effective evaluation and for substantiating the validity of stated claims. The Tenderer shall assume that the Authority has no prior knowledge of the Tenderer's experience and will base its evaluation on the information presented in the Tender.

    The Tender must include, but does not necessarily have to be limited to, the following two (2) separate sections:

    a. Past Performance Data

        1. The Past Performance Data section shall include past performance information for at least three (3) similar SWRO plants (at least one of which must have a design water production capacity of no less than 3,800 m^3/d (1 MGD)) which use commercially available isobaric energy recovery devices, that will confirm that the company has successfully operated these SWRO plants for more than five (5) years continuously.

            Private and/or municipal reference information must include the name and address of the customer, primary point of contact, telephone number and email address, and a description of these SWRO plants and the Tenderer's involvement.

            The Tenderer shall provide references for each firm participating in a joint venture or teaming arrangement.

The Water Authority shall contact the references to determine customer satisfaction with the Tenderer's performance. If the Tenderer fails to provide valid client contacts or the references fail to respond, past performance references will be deemed to be missing and the Tender may not be considered further.

b. The Corporate Information shall include, as a minimum, the following:

1. Certificate of Incorporation.
2. Memorandum and Articles of Association.
3. Copy of any Shareholders' or Partnership Agreement(s).
4. The name, title, address, e-mail, and telephone number of the company representative who is authorized to discuss the Tender with the Water Authority.
5. Certified copy of board resolution or minute approving the submission and contents of the Tender.
6. For Joint Venture also add a copy of the joint venture agreement between or among the joint venture parties.
7. Audited financial statements for the last five (5) years or such other documentation that can be independently verified.
8. The name(s) and resume(s) of the intended principal(s) that will be employed full-time on Grand Cayman to oversee and manage the operations for a minimum of the first three (3) years of the Contract.

15. The Water Authority shall not be seen to have approved all or any part of the information submitted by the Tenderer unless the Tenderer is so notified in writing.

16. The Water Authority shall not be responsible for any costs or expenses incurred in the preparation and submission of the Tender.

17. The Tender, as well as all correspondence and documents relating thereto shall be written in the English language.

18. The currencies of the Tender shall be as specified in the Tender Documents.

Return of Tenders

19. Tenderers shall be supplied with an electronic copy of the Tender Documents.

One hard (printed) copy of the Tender Documents, which for the purpose of identification shall have each page signed by or on behalf of the Tenderer, shall be duly completed, and sealed in an envelope. On the outside of the envelope or courier box the tender # and title and closing data and time ("**PPC-2019-WAC-004-RFP Operating Agreement for Sea Water Reverse Osmosis Plant at North Side Water Works, Grand Cayman. Closing Date/Time: Wednesday 27 February 2019, 12:00 pm (noon)**") shall be clearly written as the first lines of the address.

The sealed envelope or package shall be delivered, no later than 12:00 p.m. on Wednesday 27 February 2019, to:

Public Procurement Committee
c/o Treasury Department
Government Office Administration Building
133 Elgin Ave, George Town
Grand Cayman, Cayman Islands

20. Only tenders received on time will be accepted. Faxed or e-mailed tenders shall not be accepted as a substitute. Tenders may be delivered by courier service, but the Water Authority shall not be responsible for the failure of any courier service to deliver on time and any such late tender shall not be accepted.

21. All entries and signatures shall be in indelible ink. No tender may be altered or amended after having been opened.

22. Tenders will not be returned.

23. Tenderers are advised that, after award, all Proposals will be subject to the Cayman Islands' Freedom of Information (FOI) Law. Records may be exempt from disclosure in accordance with the FOI Law. Tenderers may make a written request that trade secrets and other proprietary data contained in their Tender be held confidential. Material considered confidential by the Tenderer must be clearly identified, and the Tenderer must include a brief statement in their cover letter that sets out the statutory basis for confidentiality (for more information regarding the FOI Law refer to the Freedom Of Information Unit website at http://www.foi.gov.ky).

Tenders to remain subject to Acceptance

24. No Tenderer may withdraw its Tender after the Tender Opening unless a period of ninety (90) days has elapsed without any Tender being accepted.

Award of Contract

25. All Tenders will be evaluated and all Tenderers will be notified by e-mail of the outcome of the evaluation.

26. The Water Authority shall determine to its satisfaction during the Tender evaluation whether a Tenderer meets the eligibility criteria specified in Item 2 of these Instructions for Tendering.

27. The Water Authority shall not be bound to accept the lowest or any of the Tenders. The Water Authority reserves its right to reject any or all Tenders for any reason whatsoever in its sole discretion, including without limitation the right to reject any or all non-conforming, non-responsive, unbalanced or conditional Tenders, and to reject the Tender of any Tenderer if it believes that it would not be in its best interest to make an award to that Tenderer, whether because the Tender is not responsive or fails to meet any other pertinent standard or criteria established by the Water Authority.

28. The Contract will be awarded to the responsive, responsible Tenderer with the highest score for the Tender using the Tender Evaluation Criteria (see Item 29) and which, in the Water Authority's sole and absolute judgment, will best serve the interests of the Water Authority.

29. Tender Evaluation Criteria: Certain elements of the Tender are mandatory, the submission of these will determine whether a Tender is "compliant or not", failure to submit any mandatory items will result in a "failed" Tender and will not be assessed further.

    a. Mandatory items (Pass or Fail):

        (1) One (1) completed and signed copy of the Tender Documents, including the completed Form of Tender and Appendix to the Form of Tender
        (2) Acknowledgement of receipt of Tender Addenda (if any)

(3) Acknowledgement of, and confirmation of ability to comply with, all applicable local laws and regulations relating to carrying on business in the Cayman Islands
(4) Past Performance Data (incl. references)
(5) Corporate Information (incl. financial data)
(6) Staff Experience, particularly those of principal and plant senior staff
(7) Other required information (see Items 2 and 14 of these Instructions)
(8) A copy of the e-mail sent to ContractReview@waterauthority.ky acknowledging receipt of the Tender Documents in order to be a registered potential Tenderer (*).

Note*: This only applies to those Tenderers who downloaded the Tender Documents directly from the Water Authority's website or the Cayman Islands Central Tender Committee's website.

The Costing Analysis (Criteria b) and Technical Assessment (Criteria c) will only be carried out for those Tenderers that have satisfactorily passed Assessment Criteria a (Mandatory Items).

b. Costing Analysis (~88% of assessment) (max. 150 points):

Three (3) scenarios will be reviewed:

1. Immediate Monthly Cost: using the fees as per the Tender (i.e., Base Monthly Overheads Fees, Base Quantity Fees, and Specific Energy Consumption Guarantee of Plant ($ENCON_{spec}$)) and a cost of electricity of CI $ 0.27/kWh), applied to an average daily quantity of 4,600 cubic metres (**) for a period of 30 days.

2. Future Monthly Cost (i): using the fees inflated as per the Tender (assuming a cumulative inflation of 16%) and a cost of electricity of CI $ 0.34/kWh), applied to an average daily quantity of 6,300 cubic metres for a period of 30 days.

3. Future Monthly Cost ii): using the fees inflated as per the Tender (assuming a cumulative inflation of 23%) and a cost of electricity of CI $ 0.40/kWh), applied to an average daily quantity of 7,500 cubic metres for a period of 30 days.

(**): The average daily quantity of water produced by the North Side SWRO plant in the period January 2018- December 2018 was 4,533 cubic metres per day.

For each of these 3 scenarios:

a. The Tender with the Lowest Monthly Cost will be awarded 50 points.

b. All other Tenders will be awarded points as follows: 50 * (1-P)

with P being the lowest of:

(i) {(Tenderer's Monthly Cost/Lowest Tendered Monthly Cost) – 1}, and
(ii) 1

Category	Points	Range	Points
Immediate Monthly Cost	50	←----------→	0
Future Monthly Cost (i)	50	←----------→	0
Future Monthly Cost (ii)	50	←----------→	0

c. Technical Assessment (~12% of assessment) (max. 20 points):

1. Standard of Tender Submission (i.e., Quality/Completeness) (max 5 points)
2. Company Information, including References (***)(max 5 points)
3. Experience of principal and plant senior staff (max 5 points)
4. Past Performance Data (Experience, References,) (max 5 points)

(***): The Company Information referred to in this item should be relevant to this contract, i.e., covering the operation and maintenance of SWRO plants (as stated in the Tender Documents)

Assessment Criteria c (Technical Assessment) is by definition somewhat subjective. Therefore, three (3) of the Water Authority engineering staff will, independently, review and score each Tender. The scoring for Assessment Criteria c shall be the average of the three independent scores.

Technical Assessment

Category	5 points	4 points	3 points	2 points	1 point	0 Point
Standard of Tender Submission	Excellent	←----------→				Very Poor
Company Information	Excellent/ Relevant	←----------→				Very Poor / Not Relevant
Experience of principal and plant senior staff	Excellent/ Relevant	←----------→				Very Poor / Not Relevant
Past Performance Data	Excellent/ Relevant	←----------→				Very Poor / Not Relevant

The successful Tenderer will be the company that has the highest combined score of Assessment Criteria b and c (max possible score 170 points)

30. In the event of failure of the successful Tenderer to provide any of the required documents, the Water Authority may award the Contract to the next highest assessed responsive Tenderer. Such award, if made, will be made within ninety (90) days after the Tender Opening.

31. The Water Authority may evaluate and award the Contract without discussions. However, the Water Authority reserves the right to conduct discussions if deemed necessary. The Water Authority may, at its discretion, ask any Tenderer for a clarification of its Tender, and conduct such investigations as it deems necessary to assist in the Tender examination, evaluation and comparison of the

Tenders, and to establish responsibility, qualifications, and financial ability of Tenderers to perform the Agreement to the Water Authority's satisfaction.

The Water Authority's requests for clarification etc. and the Tenderers' responses shall be in writing.

No change in the substance of the Tender or prices in the Tender shall be sought, offered, or permitted.

If a Tenderer does not provide clarifications of its Tender by the date and time set in the Water Authority's request for clarification, its Tender may be rejected.

32. If the Contract is to be awarded, the Water Authority will give the successful Tenderer a Letter of Acceptance within ninety (90) days after the Tender Opening.

Miscellaneous Information

The following is given for information purposes only

33. A schedule of fees for the different categories of work permits for expatriate personnel can be obtained from: The Secretary, The Immigration Board, P.O. Box 1098, Grand Cayman KY1-1102, tel.: (345) 949-8344, or at www.immigration.gov.ky .

34. Information on forming a company on the Cayman Islands can be obtained from: Registrar of Companies, P.O. Box 123, Ground Floor, Government Admin. Building, 133 Elgin Avenue, George Town, Grand Cayman KY1 – 9000, Tel: (345) 946-7922 Fax: (345) 949-0969, or at www.ciregistry.gov.ky .

Modification of the Conditions of Contract

35. Tenderers are informed that the Conditions of Contract specified in this document may be subject to modification by mutual agreement prior to signing the Contract Agreement. Amendments of various sections of this document may be deemed necessary for stylistic reasons or for dealing with specific terms proposed by the successful Tenderer that are not covered by the original document.

FORM OF TENDER

NAME OF CONTRACT : Operating Agreement for Sea Water Reverse Osmosis Plant at North Side Water Works, Grand Cayman, Cayman Islands

(Notes : The Appendix forms part of the Tender. Tenderers are required to fill in all the blank spaces in this Form of Tender and the Appendix to the Form of Tender.)

TO : The Water Authority of the Cayman Islands, Grand Cayman, Cayman Islands,

(1) Having examined the Tender Documents, comprising the Instructions for Tendering, the Form of Tender, the Contract Agreement, the Conditions of Contract, Appendices, and Tender Addenda Nos. _____, for the execution of the above-named Contract, we, the undersigned, offer to operate and maintain the Plant and remedy any defects therein in conformity with the said Tender Documents for such sums as specified in the Appendix to the Form of Tender and as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

(2) We acknowledge that the Appendix to the Form of Tender forms part of our Tender.

(3) We confirm that we have sought independent legal and any other appropriate advice on all applicable local laws and regulations relating to carrying on business in the Cayman Islands and that if our Tender is accepted, and we are awarded the Contract, we will be in a position to comply with all such local laws and regulations as soon as is reasonably possible after being notified that the Tender has been accepted.

(4) We undertake, if our Tender is accepted, to commence the Contract as soon as is reasonably possible after the receipt of the signed Contract Agreement.

(5) We agree to abide by this Tender for the period of ninety (90) days from the day fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

(6) Unless and until the Contract Agreement is prepared and executed, this Tender, together with your written acceptance thereof, shall constitute a binding contract between us.

(7) We understand that you are not bound to accept the lowest or any Tender you may receive.

(8) We certify that all the information provided in our Tender has been prepared with due diligence, and is true and complete to the best of our knowledge. We are fully aware that inaccurate, incomplete or misleading information in our Tender will not be tolerated and that the Water Authority reserves the right to reject our Tender on these grounds.

Dated this _____ day of _____ 2019

Signature _____ in the capacity of _____

duly authorized to sign tenders for and on behalf of : _____

_____

_____
(IN BLOCK CAPITALS)

Address

_____

_____

_____

Witness _____

Address

_____

_____

Occupation

_____

APPENDIX TO THE FORM OF TENDER

SCHEDULE OF FEES

Item No.	Reference	Item Description	Unit	Amount
Base Monthly Overheads Fee:				
United States dollar portion				
1	Clause 39 (i)	Fee, for expenses incurred outside the Cayman Islands, expressed in United States Dollars, adjustable for inflation.	US $/month	_____
Cayman Islands dollar portion				
2	Clause 39 (ii)	Fee, for expenses incurred locally, expressed in Cayman Islands Dollars, adjustable for inflation.	CI $/month	_____
Base Quantity Fee:				
United States dollar portion				
3	Clause 43 (i)	Fee, for expenses incurred outside the Cayman Islands, expressed in United States Dollars, adjustable for inflation.	US $/$m^3$	_____
Cayman Islands dollar portion				
4	Clause 43 (ii)	Fee, for expenses incurred locally, expressed in Cayman Islands Dollars, adjustable for inflation.	CI $/$m^3$	_____
Specific Energy Consumption:				
5	Clause 46	Specific Energy Consumption Guarantee of Plant ($ENCON_{spec}$)	kWh/m^3	_____

Contractor's Initials or Stamp :

CONTRACT AGREEMENT

THIS AGREEMENT is made the _____ day of _____ 2019 BETWEEN THE WATER AUTHORITY of 13G Red Gate Road, George Town, PO Box 1104, Grand Cayman KY1-1102, Cayman Islands (hereinafter referred to as "the Authority") of the ONE PART and ……..., a company incorporated under the laws of the Cayman Islands whose registered office is situated at …….. (hereinafter referred to as "the Contractor") of the SECOND PART

WHEREAS

(1) The Authority is a body corporate having perpetual succession and established under section 3 of the Water Authority Law 1982;

(2) The Authority is the registered proprietor of the Site and the owner of the SWRO Plant; and

(3) The Authority has accepted a Tender from the Contractor to operate and maintain the reverse osmosis plant (the "Plant") on the Site upon the terms and conditions hereinafter appearing.

NOW THIS AGREEMENT WITNESSETH as follows:-

1. The following documents which are attached hereto shall be deemed to be incorporated into and read and construed as part of this Agreement:-

   (A) This Contract Agreement
   (B) The Letter of Acceptance dated ……..
   (C) The Tender Addenda Nos. . . . . .
   (D) Conditions of Contract
   (E) The Appendices to the Agreement
   (F) The Contractor's Tender
   (G) Contract Drawings

2. In this Agreement the words and expressions shall have the same meanings respectively assigned to them in the Conditions of Contract.

3. In consideration of the payments to be made by the Authority to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Authority to operate and maintain the Plant and remedy any defects therein in conformity in all respects with the provisions of this Agreement.

4. The Contractor hereby covenants with the Authority to commence the Contract on ……
[*date to be agreed upon between the Authority and the Contractor*]

5. The Authority hereby covenants to pay the Contractor in consideration of the operation and maintenance of the Plant and the remedying of defects therein, in the manner prescribed by the Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their authorized officers.

Signed by the said Water Authority
in the presence of

By: _____
CHAIRMAN

_____
WITNESS

_____
BOARD MEMBER

Executed on behalf of

_____

By:

_____
DIRECTOR

duly authorized in the presence of

_____
WITNESS

CONDITIONS OF CONTRACT

Definition of Terms

1. The following words shall have the meanings herein assigned to them unless there is something in the subject matter or context inconsistent with such construction.

   The “Agreement” shall mean the agreement between the Authority and the Contractor incorporating these Conditions of Contract (including Appendices A through H) and the Contract Drawings;

   The "Agreement Date" shall mean the date of the Agreement;

   The "Authority" shall mean the Water Authority of the Cayman Islands incorporated by the Water Authority Law, 1982 and of P.O. Box 1104, Grand Cayman KY1- 1102; and shall be deemed to include, where appropriate, its duly authorized representatives or agents;

   "$CI_{current}$" shall mean on any given date the Cayman Islands Consumer Price Index on the previous 30 September;

   The “Commencement Date” shall mean the date upon which the Contractor first assumes responsibility under the Agreement to operate and maintain the Plant.

   The “Conditions of Contract” shall mean these Conditions;

   The “Contract Drawings” shall mean the contract drawings referred to in this Agreement;

   The "Contractor" shall mean the Contractor whose tender has been accepted by the Authority and shall include the Contractor’s legal personal representatives, successors and assigns;

   A “Critical Spare” shall mean those Plant parts essential to ensure the meeting of the delivery requirements for the Water, as further defined in Appendix F.

   A "cubic metre" shall mean a cubic metre of volumetric measure, and for the purposes of this Agreement shall be deemed equal to 264.2 US gallons;

   The "Delivery Point" shall mean the location of the sampling tap adjacent to the Authority's totalizing flow meter, as described under Clause 25, at which point the ownership of and responsibility for the Water passes to the Authority;

   The “Electrical Conductivity” (E.C.) shall mean the parameter used to determine the salt content (or total dissolved solids level) of the Water as measured using an Electrical Conductivity sensor, normalized to a specific reference temperature (25ºC or 77ºF), used, maintained and calibrated in accordance with the manufacturer’s recommendations using standards appropriate for the Water, and measured in units of micro-Siemens/centimetre (µS/cm);

   “$E_{current}$” shall mean on any given date the actual average cost of electricity (CI $/kWh), provided by Caribbean Utilities Company Ltd., and consumed by the Plant for the month under consideration, expressed in four (4) decimals of Cayman Islands dollars per kWh; For the avoidance of doubt, the actual average cost of electricity is calculated as the total cost of electricity during the previous month (corrected, if necessary, as indicated (see (*)) divided by the total number of kWhs of electricity consumed by the Plant. This calculation shall be substantiated by monthly invoices (i.e.,

CUC bills) which shall reflect the quantity (in kWhs) and cost (in CI$) of electricity supplied in the previous month.

(*) It is the responsibility of the Contractor to control the electrical demand (defined by CUC as the average load over a 15-minute period). For the purpose of calculating $E_{current}$, both the Monthly Demand Charge (kW) and the Additional Capacity Charge (kW) on any CUC bill shall not exceed the highest recorded demand during any of the 24 months prior to 1 December 2018, this being 1,212 kW. In the event the demand has exceeded this, the total cost of electricity will be adjusted accordingly for the calculation of $E_{current}$.

"$ENCON_{spec}$" shall mean the specific energy consumption of the Plant and shall be deemed to mean the number of kWh of electric power required by the Plant to produce one (1) cubic metre of potable water, and deliver it to the Authority's reservoirs, as specified by the Contractor in Item No. 5 of Appendix B; This includes all electricity used for air-conditioning and area lighting of the administration offices, product water pumps, etc.

The "Exchange Rate" shall mean at any time during the Term the buying rate for Cayman Islands dollars (CI$), using United States dollars (US$), as charged by the Cayman National Bank and Trust Company Limited on the date of the Invoice. (Please note that at present the exchange rate is fixed, and is CI$ 1.00 = US$ 1.20);

"Membrane" shall mean the complete reverse osmosis membrane assembly, comprising the membrane, membrane supports, flow distribution channels, provisions for brine and product outlets, and pressure vessels. The membranes shall be specifically designed for the production of potable water from seawater and/or brackish water using the reverse osmosis process, offering high salt rejection, high flux rates, and long life.

A "Non-Critical Spare" shall mean those Plant parts that are not essential to ensure the meeting of the delivery requirements for the Water, as further defined in Appendix F.

"Penalty" shall mean the stipulated sum to be paid by the Contractor to the Authority in the event of a breach.

The "Plant" shall mean the North Side SWRO Plant, and all or any part of the mechanical, electrical and other equipment and all or any part of the civil engineering works including appurtenances which are used by the Contractor to provide feed water, purify sea water and convey water to the Reservoir;

"Quantity" shall mean the actual quantity of Water, measured in cubic metres, in accordance with Clause 25, delivered to the Authority by the Contractor;

The "Reservoir" shall mean the Authority's water storage reservoir or reservoirs, located on the Site;

The "Site" shall mean Block 58A, Parcel 100, being the North Side Water Works located at at Botanic Road, Frank Sound Grand Cayman, Cayman Islands;

The "Term" shall mean the term of the Agreement as provided for in Clause 15;

"UScurrent" shall mean on any given date the last published US Producer Price Index for Industrial Commodities less Fuels, Not Seasonally Adjusted – Series ID: WPU03T15M05, as published by

United States Department of Labor on their website (http://www.bls.gov/data) on the previous 30 September;

"Water" shall mean potable water processed by the Contractor from sea water and delivered to the Authority in accordance with the terms of this Agreement.

Scope of Work

2. The Contractor shall be responsible for performing its obligations stipulated in this Agreement in a responsible and professional manner consistent with standard operating practices and prudent industry standards. The Contractor shall undertake the activities under this Agreement in an open, honest and collaborative way and promptly respond to reasonable requests for information which, where appropriate, will be provided in its raw form.

3. The Contractor shall not be permitted to make any claim for additional payment on the ground of any misunderstanding or misinterpretation by him of the terms of this Agreement nor shall the Contractor be released from any risks or obligations imposed or undertaken by him under the Agreement on any matter which might affect or have affected the operation of the Plant.

4. The Contractor shall operate and maintain the Plant in a professional and efficient manner and in accordance with the terms and provisions set forth in this Agreement.

5. The Contractor shall satisfy the demand for Water as determined by the Authority to the limit of the design capacity of the Plant, taking due and reasonable allowance for maintenance time for the Plant, ensuring that programming of intended maintenance is notified to the Authority, it being accepted that the Contractor shall wherever possible carry out maintenance of the Plant at a time convenient to the Authority.

6. The Contractor shall meet all costs of and associated with the Plant's operation and maintenance.

   The Contractor shall be responsible for all electrical wiring downstream of the electrical totalizing meter, including all transformers, the main circuit breaker, the manual transfer switch, the emergency generator and all internal electrical wiring

7. The Contractor shall provide all chemicals, filter cartridges, replacement membranes, replacement parts and other consumables. The Contractor shall maintain an adequate supply of spare parts on Grand Cayman to ensure the reliable operation of the Plant at not less than 90% of design capacity in any one month.

   All replacement parts shall be equal or better in substance, quality and function than those included in the initial Plant. All replacement parts shall be new and unused.

8. The Contractor shall operate the Plant so as to minimize the environmental impact on the surrounding residential area. The Contractor shall comply with the following requirements:

   (i) The Contractor shall operate the Plant so that the noise emissions shall contribute no more than 50 dB(A) to the normal sound level at a distance of 50 feet from the Plant building.
   (ii) The Contractor shall operate the wet gas scrubber in such a way that the percentage of removal of hydrogen sulphide in the wet gas scrubber is at least 99%. In any event the concentration of hydrogen sulphide emissions shall not exceed 0.01 ppmv at a distance of 50 feet from the Plant building.

If it is proven to the satisfaction of the Authority that the Plant is not operating within the allowable noise and hydrogen sulphide emission levels the Authority may stop the operation of the Plant until such time as the Plant is able to operate within the allowable emission levels. The Authority shall not be responsible for any loss, cost or expense that this might cause to the Contractor.

9. The Contractor shall maintain an adequate security fence around any hazardous equipment and chemical storage not contained within the Plant building. The Contractor shall ensure that all equipment and chemicals are locked to prevent tampering.

10. The Contractor shall be allowed to make modifications to the Plant to improve performance, reduce operating cost, and/or improve the maintainability of the Plant, with the prior consent of the Authority in writing. All costs associated with these modifications shall be to the Contractor's account.
    (i) Notwithstanding the above, within 12 months of the Commencement Date the Contractor shall replace the Dual Work Exchanger Energy Recovery (DWEER™) system with Energy Recovery Inc. (ERI) isobaric energy recovery devices.

Insurance

11. Throughout the Term, the Contractor shall keep the Authority wholly indemnified from and against any act loss damage or liability suffered or incurred by the Authority or any third party in or arising out of the operation by the Contractor of the Plant.

12. Without prejudice to the generality of Clause 11 the Contractor shall before the Commencement Date insure in the joint names of the Contractor and the Authority against liability for damage or injury to any person (including any employee of the Contractor or the Authority) or to any property due to or arising out of the operation of the Plant. Such insurance shall be effected for an amount not less than one million United States dollars (U.S. $1,000,000.00) per claim with an insurer and in terms to be approved in writing by the Authority. The Contractor shall from time to time when so required by the Authority produce the policy and the receipts for the premiums or other satisfactory evidence of insurance cover as aforesaid.

13.
    (i) In addition to the insurance referred to in the immediately preceding clause, the Contractor shall before the Commencement Date to the end of the Term, insure or cause to be insured in the joint names of the Contractor and the Authority against loss or damage caused by fire, lightning, explosion, aircraft (including articles dropped from aircraft), earthquake, shock, hurricane, flood, riot, civil commotion, malicious persons, overflowing of water pipes, tanks and other apparatus, impact by road vehicles and such other insurable risks against which a reasonable and knowledgeable contractor would insure. Such insurance shall be in an amount equal to the full cost of reinstating the plant in the event of its total destruction together with the cost of demolition, site clearance, architects' and other professional fees, but shall not be less than US$ 16.0 million.
    (ii) All insurances referred to in this clause and in Clause 12 shall be effected with insurers previously approved in writing by the Authority, such approval not to be unreasonably withheld or delayed.
    (iii) The Contractor shall pay or procure the payment of all premiums and other money necessary to effect and maintain all insurances referred to in this clause and shall produce to the Authority on demand the policy or policies of insurance and the receipt or receipts for the then current year's premium.
    (iv) If the Contractor shall fail to insure or to procure the insurance in accordance with this clause then the Authority may (but without prejudice to any other right or remedy of the Authority in respect of such failure) itself effect and maintain such insurance and all premiums and other

money paid by the Authority for such purpose shall be repaid by the Contractor to the Authority on demand with interest at the rate which the Cayman National Bank and Trust Company Limited would pay for a call deposit of such amount on the date of payment by the Authority, until the date of repayment by the Contractor.

(v) The Contractor shall comply with all requirements of the insurers and neither the Authority nor the Contractor shall do or permit or suffer to be done on the Site or in relation to the Plant anything which might render void or voidable any policy of insurance effected in accordance with the provisions of this clause, or as a result of which payment of the policy money might be withheld in whole or in part.

(vi) The Contractor shall notify the Authority immediately upon the occurrence of any damage or destruction of the Plant and in any such case promptly reinstate the Plant.

(vii) All money received under any policy of insurance effected in accordance with this clause shall be placed in a bank account in the joint names of the Authority and the Contractor and shall subsequently be released to the Contractor from the account in instalments against certificates issued by an Architect, or other evidence acceptable to the Authority (such acceptance not to be unreasonably withheld) of expenditure actually incurred by the Contractor in reinstating the plant.

Legal Cost and Corporate Identity

14. The Contractor shall be responsible for its own legal costs and all costs related to obtaining and maintaining its corporate identity.

Term of Agreement

15. This Agreement shall commence on the Agreement Date and shall, subject to the provisions for termination contained herein, continue for a period of seven (7) years from the Commencement Date.

Feed Water Quality

16. The composition of well water, as indicated in the analysis shown in Appendix C, is provided for information only. The Contractor shall have fully informed and satisfied himself by his own independent observations and inquiries as to the composition of the ground water, and any variation thereof. The Contractor shall not be entitled to negotiate a change in the Agreement in the event that his own independent analysis of the feed water differs from that shown in Appendix C, and that this difference has an effect on the operation of the Plant, unless the Contractor can provide evidence that shows that this change is due to un-natural causes (e.g., increase in temperature due to third parties injecting heated water into the ground; contamination of the groundwater).

Electric Power Supply

17. During the Term the Authority shall enter into an electricity supply agreement with the electricity provider (Caribbean Utilities Company (CUC) for the Plant and shall pay, on behalf on the Contractor, the monthly invoices (i.e., CUC bills) in accordance with the supply agreement.

18. In the event of an interruption in the electrical power supply occurring through no fault of the Contractor, the provisions of Clause 52 in respect of penalties shall not be applied in respect of the quantity lost owing to the interruption of electrical power. However, the Water Authority shall not be responsible for, nor pay for, any losses to the Contractor caused by any interruption to the supply of electricity.

Critical Spares Inventory

19. The Contractor shall maintain an inventory of Critical Spares throughout the Term. Critical Spares, as detailed in Appendix F, shall be held in a suitable storage facility on or near the Site, and shall be immediately re-ordered when used.

    If the Contractor shall fail to purchase any Critical Spares used at the Plant in accordance with this clause then the Authority may itself purchase such items and any money paid by the Authority for such purpose shall be deducted from any money owed to the Contractor in the month following the date of payment by the Authority.

20. At the end of the Term, unless the Agreement is terminated as per Clause 57 or 58, the Authority shall purchase all Critical Spares; the Purchase Price of Critical Spares shall be the Invoice Value (substantiated with copies of invoices) less depreciation since the date of purchase. For the purpose of this clause a depreciation rate of 10% per annum shall apply.

21. At the end of the Term, Non-Critical Spares, chemicals and supplies may be purchased by the Authority, at a price to be agreed between the parties.

22. In the event the Agreement is terminated as per Clause 57 or 58, all Critical Spares shall become the property of the Authority without further payment.

Quantity of Water Produced

23. Beginning on the Commencement Date, and on the demand of the Authority, the Contractor shall supply to the Authority in any one month an average daily quantity of Water of 8,100 cubic metres per day, which is 90% of the design capacity of the Plant.

24. The Authority shall not be responsible for any variations in demand nor any additional or associated costs that may be incurred by the Contractor in meeting a higher or lower, or any, demand within the limits of the Plant. The Authority shall take all reasonable steps to perform its obligations under this Agreement in a timely manner and so as not to hinder or delay the Contractor in the discharge of the Contractor's obligations under this Agreement.

25. Water delivered to the Delivery Point shall be measured by means of a totalizing flow meter, with metric registration. Water pumped by the Plant shall be measured by an identical flow meter, installed downstream of the product water pumps. The register of the Plant flow meter shall be easily accessible by the Authority, without the need to access the Plant building. Both flow meters shall be provided by the Authority and shall be installed as recommended by the flow meter manufacturer. At the end of each measurement period both meters will be read simultaneously and the average value of these two readings shall be deemed to be the Quantity for that period. However, if it is evident that one of the meters is malfunctioning then the other meter’s registration shall be deemed correct. The meters shall be regularly maintained and checked by an independent agency approved by both parties. The Authority shall keep in stock one spare meter identical to that in operation which shall be used during the maintenance periods of the operational meter. The Authority shall be responsible for the maintenance of the pipeline between the totalizing flow meters and any leakage that the Contractor can prove took place in this pipeline shall be included in the Quantity. However, any difference between the accumulated readings of each meter shall not, on its own, constitute such proof.

Quality of Water Produced

26. The Contractor shall only deliver Water to the Delivery Point which shall have an Electrical Conductivity (E.C.) of no more than 400 µS/cm, as determined by the Authority, and otherwise shall meet the requirements of Clause 30.

27. The Contractor shall ensure that the Water is not contaminated by any noxious chemical or other substance which in the opinion of the Chief Environmental Health Officer would be harmful to the health of the community or any chemical or substance that imparts odour, taste or colour which in the opinion of the Authority renders it unacceptable to its customers.

28. The Authority shall regularly monitor the quality of Water at the Delivery Point and shall be entitled at any reasonable time and without prior notice to take samples of Water or effluent from the Plant. The Authority shall provide the Contractor with the results of all such tests.

29. Notwithstanding the above the Contractor shall monitor the Electrical Conductivity (E.C.) continuously and provide, maintain and calibrate the monitoring equipment.

30. The quality of the Water at the Delivery Point shall be such that the individual constituents shall not exceed the allowable values as set out in Appendix D.

31. The Contractor shall ensure that all materials and equipment upstream of the Delivery Point that come into contact with the Water are clean and all such equipment shall be approved by the American Water Works Association (AWWA) or National Sanitation Foundation (NSF) for use with potable water.

32. The Contractor shall ensure that all chemicals used in the Plant that come in direct contact with the Water shall be approved by the American Water Works Association (AWWA) or National Sanitation Foundation (NSF) for use with potable water.

33. In the event of Water being delivered to the Reservoir which has been contaminated upstream of the Delivery Point by any noxious or dangerous chemical or substance, the Contractor shall bear the full cost of any claim on or against the Authority due to or arising out of such contamination and the cost of cleansing the Reservoir from any such contamination, and the cost of all water wasted as a consequence of the contamination. The latter shall be calculated as the sum of the Quantity Fee (calculated as per Clause 44) and the Energy Fee (calculated as per Clause 46) for each cubic metre of Water wasted. The Authority and the Contractor shall make every effort to remedy any problem without delay but the Reservoir shall only be reopened on certification of the Authority. Any efforts by the Authority to cooperate with the Contractor in rectifying any contamination problem shall not be construed as a waiver of the right to terminate under Clause 57 or any other Clause of this Agreement.

Performance Testing

34. At intervals as determined by the Authority (which shall not be more frequent than once every three calendar months), the Contractor shall demonstrate that over a 24-hour period, or any shorter period as may be determined by the Authority, the Plant can produce Water at the specified rate of 375 cubic metres per hour (9,000 cubic metres per day) at the ENCONspec,which meets the quality requirements.

    A performance test shall not be required during the first three (3) calendar months from the Commencement Date.

35. The Contractor and the Authority shall agree on a procedure for such performance testing, which shall be designed to minimize the amount of manual activity by each party and shall include the method of calibration of the relevant instruments. During the performance tests the membrane elements shall not be operated at a feed pressure exceeding the maximum pressure allowed by the membrane element manufacturer.

36. In the event that the performance tests are not successfully performed at any time after the Commencement Date, subject to Force Majeure (see Clause 73) or acts of the Authority the Contractor shall be subject to a daily penalty of CI$ 3,000.00 until such time that the test is successfully performed.

    Notwithstanding the above, the penalty shall not be charged in the event the results of the performance test are within 2% of the relevant production rate, quality requirements and Specific Energy Consumption Guarantee AND the performance test is successfully performed within 48 hours after the initial, unsuccessful, performance test.

Payments

37. Payments by the Authority to the Contractor for the Water shall consist of three (3) elements -

    (i) a Monthly Overheads Fee, for each calendar month (see Clauses 38 through 41), plus
    (ii) a Quantity Fee, based upon the Quantity delivered each calendar month (see Clauses 42 through 45), plus
    (iii) an Energy Fee, based upon the Quantity delivered each calendar month, and based upon the specific energy consumption guarantee ($ENCON_{spec}$) and the actual average cost of electricity $E_{current}$ (see Clause 46 through 47).

Monthly Overheads Fee

38. The Authority shall pay the Contractor a Monthly Overheads Fee which shall cover:

    (i) Staff salaries
    (ii) Accident and Public Liability Insurance
    (iii) On-site spare parts
    (iv) General Administration
    (v) Any other costs the Contractor may deem necessary

39. The Base Monthly Overheads Fee shall be the amount or amounts indicated in Items 1 through 2 of Appendix B.

    The Base Monthly Overheads Fee consists of a United States dollar amount (US $) and a Cayman Islands dollar amount (CI $).

    The United States dollar portion of the Base Monthly Overheads Fee comprises:

    (i) A fee, for expenses incurred outside the Cayman Islands, expressed in United States ("US $") dollars, adjustable for inflation.

    The Cayman Islands dollar portion of the Base Monthly Overheads Fee comprises:

    (ii) A fee, for expenses incurred locally, expressed in Cayman Islands ("CI $") dollars, adjustable for inflation.

40. Beginning on the Commencement Date, and on every 1st January thereafter, the Monthly Overheads Fee shall be calculated as follows:

    (i) The United States dollar portion of the **Monthly Overheads Fee** shall be:

    "Amount of Sub-Clause 39 (i)" x ($US_{current}$ / AAA)

    (Note: "AAA" is the value of the US Producer Price Index for Industrial Commodities less Fuels, Not Seasonally Adjusted – Series ID: WPU03T15M05, as published by United States Department of Labor on their website (http://www.bls.gov/data), on 30 September 2018. Unfortunately, at the time these tender documents were issued the latest published number was 207.4, but this was only a preliminary index, and still subject to revision)

    (ii) The Cayman Islands dollar portion of the **Monthly Overheads Fee** shall be:

    "Amount of Sub-Clause 39 (ii)" x ($CI_{current}$ / BBB)

    (Note: "BBB" is the value of the Cayman Islands Consumer Price Index on 30 September 2018. Unfortunately, at the time these tender documents were issued the latest published Cayman Islands Consumer Price Index was 105.2, dated 30 June 2018)

41. Without exception, the Authority shall, after the Commencement Date, make payment every calendar month to the Contractor of the Monthly Overheads Fee, as defined in Clause 40.

Quantity Fee

42. The Authority shall pay the Contractor a Quantity Fee for each cubic metre of Water delivered during the Term which shall cover the cost of:

    (i) Chemicals
    (ii) Filter Cartridges
    (iii) Replacement Membranes
    (iv) Any other spare parts and other consumables, and costs, which the Contractor considers necessary

43. The Base Quantity Fee shall be the amount or amounts indicated in Items 3 through 4 of Appendix B.

    The Base Quantity Fee for Water consists of a United States dollar amount (US $) and a Cayman Islands dollar amount (CI $).

    The United States dollar portion of the Base Quantity Fee comprises:

    (i) A fee, for expenses incurred outside the Cayman Islands, expressed in United States ("US $") dollars per cubic metre, adjustable for inflation.

    The Cayman Islands dollar portion of the Base Quantity Fee comprises:

    (ii) A fee, for expenses incurred locally, expressed in Cayman Islands ("CI $") dollars per cubic metre, adjustable for inflation.

44. Beginning on the Commencement Date, and on every 1st January thereafter, the Quantity Fee shall be calculated as follows:

(i) The United States dollar portion of the **Quantity Fee** shall be:

"Amount of Sub-Clause 43 (i)" x ($US_{current}$ / AAA)

(Note: "AAA" is the value of the US Producer Price Index for Industrial Commodities less Fuels, Not Seasonally Adjusted – Series ID: WPU03T15M05, as published by United States Department of Labor on their website (http://www.bls.gov/data), on 30 September 2018. Unfortunately, at the time these tender documents were issued the latest published number was 207.4, but this was only a preliminary index, and still subject to revision)

(ii) The Cayman Islands dollar portion of the **Quantity Fee** shall be:

"Amount of Sub-Clause 43 (ii)" x ($CI_{current}$ / BBB)

(Note: "BBB" is the value of the Cayman Islands Consumer Price Index on 30 September 2018. Unfortunately, at the time these tender documents were issued the latest published Cayman Islands Consumer Price Index was 105.2, dated 30 June 2018)

45. Without exception, the Authority shall, after the Commencement Date, make payment every calendar month to the Contractor of the Quantity Fee, as defined in Clause 44, for the Quantity delivered to the Authority during the preceding calendar month.

Energy Fee

46. The Contractor shall warrant and guarantee the specific electrical energy consumption of the Plant. This specific energy consumption guarantee (ENCONspec) shall be specified as the number of kWh of electric power required to produce one (1) cubic metre of Water.

The **Energy Fee** shall be calculated as: $ENCON_{spec} \times E_{current}$

The Specific Energy Consumption Guarantee shall be the number indicated in Item 5 of Appendix B.

47. Without exception, the Authority shall, after the Commencement Date, make payment every calendar month to the Contractor of the Energy Fee, as defined in Clause 46, for the Quantity delivered to the Authority during the preceding calendar month.

Deductions for Electricity Payments

48. As per Clause 17, the Authority shall pay, on behalf of the Contractor, for all electric power consumed by the Plant. The Authority shall deduct any electricity payments made to the electricity provider, at cost, from the following month's monies owed to the Contractor.

Time for Payment

49. At the beginning of each month, following the Commencement Date, the Contractor shall invoice the Authority the Monthly Overheads Fee for that month. The Authority shall, within 15 days of receiving such invoice, pay the Monthly Overheads Fee.

50. At the beginning of each month, following the Commencement Date, the Contractor shall invoice the Authority the Quantity Fee and the Energy Fee for the Quantity delivered to the Authority during the preceding month. The Authority shall, within 15 days of receiving such invoice, pay the Quantity Fee and Energy Fee for the Quantity delivered to the Authority.

51. In the event of the failure of the Authority to make payment within the times stated, the Authority shall pay to the Contractor interest upon all sums unpaid at a rate per annum equivalent to the interest rate at which the Cayman National Bank and Trust Company Limited would pay for a call deposit of such an amount on the date upon which such payment first becomes overdue. In the event of any variation in the said Bank Rate being announced whilst such payment remains overdue the interest payable to the Contractor for the period that such payment remains overdue shall be correspondingly varied from the date of each such variation.

Deductions

Failure to meet the Guaranteed Quantity

52. On the demand of the Authority the Contractor shall supply to the Authority in any one calendar month an average daily quantity of 8,100 cubic metres of Water.

The penalty provision hereinafter written shall come into effect if all of the following conditions are met:

(a) Subject to Force Majeure (see Clause 73), if in any one day the Contractor whether by its own default or that of any other person and for whatever reason shall have failed to deliver the quantity of Water demanded by the Authority up to a maximum amount of 9,000 cubic metres per day; and

(b) The quantity of Water demanded by the Authority in the relevant calendar month can be accepted in the Reservoirs; and

(c) The Plant has produced less than 90% of its rated capacity in the relevant calendar month (i.e., 8,100 cubic metres per day multiplied by the number of days in the relevant calendar month) during the month in which the Water is demanded.

In this event the Contractor shall pay to the Authority a penalty. This penalty shall be calculated as the difference between (A) the current Public Authority rate of water (CI$ per cubic metre) sold by the Water Authority on Grand Cayman, and (B) the sum of the Quantity Fee (calculated as per Clause 44) and the Energy Fee (calculated as per Clause 46), for each cubic metre of Water less than 8,100 cubic metres in any one day that the Contractor is unable to supply on the demand of the Authority.

The Authority may recover the penalty by deducting it from the following month's monies owed to the Contractor.

53. In the event of Force Majeure (see Clause 73), or interruption in the electrical power supply through no fault of the Contractor, during part of the month under consideration, the quantity of Water that can be demanded by the Authority (as per Clause 52) during that month shall be 8,100 cubic metres per day multiplied by the number of days that Force Majeure, or interruption in the electrical power supply, was not in force during that month.

Remedy for lower quality water

54. Notwithstanding Clauses 26 and 30, in the event that the Contractor is unable to deliver Water to the Delivery Point of such quality that the individual constituents do not exceed the allowable values as set out in Appendix D then the Contractor may deliver Water to the Authority provided that the individual constituents do not exceed the maximum values as set out in Appendix D. In such case the Contractor shall be subject to a penalty.

The penalty, for each individual constituent exceeding the allowable value as set out in Appendix D, shall be calculated as follows:

0.30 x (QF + EF) x (actual value – allowable value)/(maximum value – allowable value)

whereby
QF = the Quantity Fee (calculated as per Clause 44) and
EF = the Energy Fee (calculated as per Clause 46)
actual value = the actual value for the individual constituent
allowable value = the allowable value for the individual constituent as set out in Appendix D
maximum value = the maximum value for the individual constituent as set out in Appendix D

The penalty shall be deducted from the agreed price of Water, using a weighted average calculation for each individual constituent for each day the allowable value thereof, as set out in Appendix D, is exceeded, and applied to the Quantity delivered to the Authority that day.

The overall penalty shall be the sum of the penalties for each individual constituent as itemized in Appendix D, but the overall penalty shall not exceed the sum of the Quantity Fee (calculated as per Clause 44) and the Energy Fee (calculated as per Clause 46) multiplied by the Quantity delivered to the Authority during the calendar month.

55. In the event that the Authority allows delivery of Water for which the individual constituents exceed the maximum values as set out in Appendix D, then the above penalty calculation shall only apply up to the maximum values as set out in Appendix D.

56. In the event that Water is delivered with individual constituents exceeding the maximum values as set out in Appendix D, or with any E-coli or total coliform bacteria, the Authority may immediately stop that Water entering the Reservoir and shall not be responsible for any loss, damage, cost or expense that this might cause to the Plant. The Contractor shall make good, at his expense, any damage caused to the Plant by this action.

Termination of the Agreement

57. Without prejudice to the provisions of Clauses 52 through 56, in the event of a breach by the Contractor of any of the terms of the Agreement, the Authority, on becoming aware of such breach, shall immediately notify the Contractor by notice in writing, delivered to the registered office of the Contractor, and specifying the breach, and the date when the breach occurred and informing the Contractor of the action it is required to take to remedy the breach and of the time period allowed for this action to be taken (the "Allowed Period", which period shall include any extensions given hereunder). The Allowed Period shall be a reasonable time but shall not in any event exceed two months and in the case of the Contractor's delivering Water to the Reservoir with one or more individual constituents exceeding the maximum values as set out in Appendix D without the permission of the Authority, shall not exceed 10 days. In the event that the Contractor fails to remedy the breach within the Allowed Period the Authority may extend the Allowed Period or may immediately terminate this Agreement on the expiration of the Allowed Period by a further notice in writing, provided the date of such termination notice is within 15 days of the expiration of the Allowed Period.

In the event of such termination, or termination under Clause 58, then the Contractor shall immediately cease operating the Plant upon receipt of notice of termination.

58. If the Contractor

(i) petitions for relief or has a petition filed against it which is not dismissed within thirty (30) days under the provisions of any bankruptcy or insolvency legislation; or
(ii) goes into compulsory liquidation; or
(iii) is adjudicated as bankrupt; or
(iv) has a receiver appointed for its business; or
(v) makes an assignment for the benefit of its creditors

then the Authority may give notice terminating this Agreement. The effective date of termination is the date of delivery of the notice.

59. In the event of termination of the Agreement, the obligations of both parties related to any amounts owing shall subsist and the parties may take such action allowed under law to settle such obligations.

Commencement of Operation of the Plant

60. In the event that the Commencement Date has not occurred as indicated in the Contract Agreement, then the Contractor shall be in breach of the Agreement and subject to extension due to delays under Clause 66 the Authority may terminate the Agreement in accordance with Clause 57.

Construction of Agreement and Jurisdiction

61. The Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the laws of the Cayman Islands. The parties hereby irrevocably agree to submit to the exclusive jurisdiction of the Cayman Islands courts in respect of any dispute or claim arising out of or in connection with this Agreement or any of its provisions, its subject matter or formation, or out of any action taken or omitted to be taken under this Agreement or in connection with the administration of this Agreement.

62. Information concerning the Agreement and any information obtained either by the Contractor or the Authority in the course of execution of the Agreement or by any person employed by him or it in connection with the Agreement in the course of such employment is confidential and shall be used by the Contractor, by the Authority and by any such person solely for the purpose of the Agreement and shall not at any time be disclosed by the Contractor, by the Authority or by any such person without the consent of the other party to the Agreement except to such persons and to such extent as may be necessary for the execution of the Agreement.

Non-assignability of the Agreement

63. This Agreement shall not be assigned nor transferred in whole or in part without the prior written consent of the parties.

Notices

64. Notices may be served upon the registered office of the Contractor and upon the Authority. Any written notice required or permitted under the terms of the Agreement shall be sent by certified or registered mail, e-mail or courier, or be delivered by hand during business hours.

65. Notices shall be deemed received seven (7) business days following the date post-marked in the case of notices sent by certified or registered mail, two (2) business days if sent by e-mail or courier, and immediately if delivered by hand.

66. The extension of time for the performance by the Contractor of its obligations under the Agreement or the failure or forbearance on the part of the Authority immediately to enforce any right penalty or obligation under the terms of the Agreement shall not be construed as a waiver of any such right penalty or obligation which may accrue or arise out of the Agreement.

67. The Authority's address is: Water Authority - Cayman, 13G Red Gate Road, P.O. Box 1104, Grand Cayman KY1-1102, Cayman Islands.

Binding Effect of Agreement

68. This Agreement shall be binding upon the parties and their respective successors and may be amended or modified only by a formal agreement signed by an officer of both parties.

69. This Agreement sets forth the entire agreement of the parties with respect to its subject matter. The parties acknowledge and confirm that they have not entered into this Agreement on the basis of any warranties or representations, whether orally or in writing, that are not expressly incorporated into this Agreement.

Customs duties

70. The Water Authority is exempt from duty on all materials and equipment imported into the Islands to be used on any project, as per section 11.6 of the Water Authority Law, 2011.

    In order to avoid that any import duties are being levied, the Contractor shall ensure that:

    (i) all shipments for spare parts, membranes, computer equipment, chemicals, filters, expendables, and all other items required for the operation, control, monitoring, and maintenance of the Plant are consigned to the Water Authority – Cayman; and
    (ii) all Customs Importation Forms are stamped and signed by the Water Authority.

71. The Contractor shall pay all Customs duties and package tax due upon the items covered by Clause 70 and which are charged as a result of the Contractor failing to comply with the requirements of Clause 70.

72. Notwithstanding Clause 70, the Contractor shall pay all Customs duties and package tax due upon tools and test equipment required for the operation and maintenance of the Plant, but which will not become part of the Plant.

Force Majeure

73. (1) The Contractor shall have no liability for a consequence of any of the following events :

    (i) a flood, storm, hurricane or other natural event; or
    (ii) any war, hostilities, revolution, riot or civil disorder; or
    (iii) any destruction, breakdown (permanent or temporary) or malfunction of, damage to any premises, plant, equipment or materials of the Contractor if that event and consequence was not preventable and foreseeable; or
    (iv) the introduction of, or any amendment to a law or regulation or any change in its interpretation or application by any authority; or
    (v) any action taken by a government or public authority including any failure or delay to grant a consent exemption or clearance if that event and consequence was not preventable and foreseeable; or
    (vi) any strike, lockout or other industrial action; or

(vii) any unavailability of or difficulty in obtaining any plant, equipment or materials if that event and consequence was not preventable and foreseeable; or
(viii) any breach of contract or default by or insolvency of, a third party including an agent or sub-contractor.

(2) For this purpose an event or the consequence of an event is not preventable and foreseeable if and only if the Contractor could not have prevented it by taking steps which it could reasonably be expected to have taken .

(3) Sub-Clause (1) does not apply unless the Contractor

(i) notifies the Authority of the relevant event and consequence as soon as possible after it occurs;
(ii) promptly provides the Authority with any further information which the Authority requests about the event (or its causes) or the consequence; and
(iii) promptly takes any steps (except steps involving significant additional costs) which the Authority reasonably requires in order to reduce the Authority's losses or risk of losses.

(4) It is for the Contractor to show that a matter is a consequence of an event covered by Sub-Clause (1), that the event and the consequence was not preventable and foreseeable and that it has satisfied the conditions set out in Sub-Clause (3). The duty of the Contractor to perform its obligation under this Agreement shall be suspended until such circumstance shall have ceased without the imposition of any penalty as provided for in Clause 52.

Rates of Exchange

74. All payments shall be made in United States dollars (US$) and Cayman Islands dollars (CI$), as specified in the various clauses. However, if, at any time during the Agreement, it is deemed necessary to convert Cayman Islands dollars (CI$) into United States dollars (US$), or vice versa, the conversion will be made at the Exchange Rate.

Change in Local Legislation

75. If, there occur in the Cayman Islands changes to Law or any regulation of any duly constituted authority, or the introduction of any such Law or regulation which causes additional or reduced costs to the Contractor, and the Contractor can prove that it thereby incurs additional cost, then the fees set out in Clauses 38 through 47 shall be modified accordingly to take in to account such additional costs and these revised fees shall be paid by the Authority. Any such increase in the fees shall reflect only the actual increase in the cost of production of water without any element of profit. Where any subsequent changes in Cayman Islands legislation can be proven to reduce the Contractor's costs then the fees set out in Clauses 38 through 47 shall be reduced accordingly to take into account such reduced costs and these revised fees shall be paid by the Authority.

Employment of Staff

76. The Contractor shall use its best endeavours to employ persons possessing Caymanian status in various categories of employment in its operation, it being understood that the Contractor has the right to import key trained or skilled personnel (and their dependants) or otherwise recruit such personnel for employment in accordance with the laws of the Cayman Islands for the time being in force relating to work permits.

77. The Authority shall support the Contractor in its application for Work Permits for key trained or skilled expatriate persons to be employed to ensure the proper operation of the Plant. However,

the Contractor shall use its best endeavours to employ Caymanian persons in all categories of employment in its operation and to train them for higher categories wherever possible.

78. The Contractor shall obtain and pay all fees for any required work permits for expatriate personnel.

Training of Authority Staff

79. During the Term the Contractor shall provide hands-on training to Authority staff in the general operation and maintenance of the Plant. The training will be primarily concerned with the start-up, control and other general operating procedures for the Plant. The training shall be scheduled so as not to interrupt the production of Water.

Arbitration

80. Save as otherwise expressly provided, any dispute, difference or question which may arise between the Authority and the Contractor as to any matter arising under or by virtue of the Agreement or as to their respective rights and liabilities in respect thereof, and in respect of which amicable settlement cannot be reached within ninety (90) days of either Party advising the other in writing of such dispute, difference or question, may be referred to arbitration, and such arbitration shall take place in accordance with the Arbitration Law, 2012. The model clause of the said law shall apply. The result of such arbitration shall be binding unless the arbitrator has made obvious legal mistakes or behaved improperly.

Severability

81. If any provision or part-provision of this Agreement is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this clause shall not affect the validity and enforceability of the rest of this Agreement.

Counterparts

82. This Agreement may be executed in any number of counterparts, each of which, when executed, shall be an original. All counterparts together shall constitute one and the same Agreement. This Agreement shall not be effective until each party has signed at least one counterpart.

APPENDICES TO THE AGREEMENT

APPENDIX A

OPERATION MANAGEMENT REQUIREMENTS

1. GENERAL

The Contractor shall operate and maintain all Plant (e.g., equipment, instrumentation, systems (SCADA, controls etc.), structures, and utilities) in such a manner as to satisfy the Plant performance standards and in accordance with the Operation Management Requirements as described in this Appendix A.

The Contractor shall maintain the Plant in good working order.

The Contractor shall maintain the aesthetic quality of the Plant, with due allowance for reasonable wear and tear.

The Contractor shall maintain adequate equipment inventory to facilitate the repair and replacement of equipment.

All operation services shall meet the Authority's requirements and meet prudent industry practice standards and shall include, but shall not be limited to:

a) Operating and maintaining (to include repair and replacement) the Plant whilst meeting the water quality and quantity obligations under the Agreement, and in such a manner that the assets can achieve their design lives.
b) Operating the Plant in compliance with industry practices and appropriate Environmental and Safety standards;
c) Purchasing the necessary chemicals, membranes and other consumables required to achieve plant operation;
d) Determining appropriate staffing levels and maintaining these levels with competent staff;
e) Maintaining comprehensive records relating to Plant performance;
f) Providing monthly reports and invoices to the Authority and any additional reports as may be reasonably required;
g) Conducting appropriate inspections and making the Plant available for inspections by the Authority;
h) Obtaining and maintaining water and telecommunications services; (note: The Authority will enter into an electricity supply agreement with the electricity provider (Caribbean Utilities Company (CUC) for the Plant and shall pay, on behalf on the Contractor, the monthly invoices (i.e., CUC bills) in accordance with the supply agreement.
i) Developing, implementing and enforcing of programs for safety, quality assurance and quality control;
j) Disposing appropriately of all discharge water and concentrate, and all other waste, (e.g., wastewater, spent chemicals);
k) Complying with all permits and Governmental approvals related to Plant operation;
l) Supporting the Authority for maintaining good relationships with the general public (including Plant tours, etc.).
m) Cleaning up and disposing of any chemical spills as instructed or required by the Authority, and/or the Chief Environmental Health Officer).
n) Carrying out the services in a safe manner that protects the health and safety of all operating personnel and people on or near the Site.

2. REPORTING

Within thirty (30) days prior to the anticipated Commencement Date of plant operations, the Contractor shall develop and submit for the Authority's approval reporting procedures and forms for recording of Plant performance during the Term.

As a minimum, the Contractor shall provide the following reports:

a) Monthly Operating Report
b) Annual Operating Report

2.1 Monthly Operating Report Requirements

The Authority shall at all times have the right to enter any part of the Plant to carry out any inspection provided that Authority staff are fully conversant with and follow the Contractor's health and safety requirements.

The Authority shall jointly with the Contractor conduct a walk through the Plant to verify that Plant operations and maintenance is being properly performed. Typically this joint walk through shall not be more frequent than once every month.

The Contractor shall prepare a Monthly Operating Report regarding the Plant performance, operations and maintenance. This report shall be submitted to the Authority no later than fifteen (15) days after the end of the Month.

The Monthly Operating Report shall include as a minimum the following:

a) Compilations of the daily records of Water quantity (cubic metres) delivered to each Delivery Point.
b) A summary of all test reports prepared during the month with respect to source (feed) water quality characteristics and parameters (e.g., temperature (degree Celsius), conductivity (µS/cm)).
c) A summary of all test reports prepared during the month with respect to Water quality characteristics and parameters as specified in Appendix D.
d) A description of recommended Plant or unit shutdowns for maintenance and repairs during the current month and anticipated during the following month.
e) Description of unscheduled repairs.
f) A list of significant preventive maintenance activities performed during this month and similar activities anticipated for the following month.
g) Information on the performance of the RO membrane system (*)
h) Any anticipated adverse conditions that may affect the ability of the Plant to receive and treat source water and deliver Water to each of the points of delivery.
i) The results of any inspections conducted by governmental regulatory authorities during the current month, including recommended or required follow-up actions by the Contractor.
j) The amount of electricity used during such month (in kWh).
k) Information on any power outages that have occurred during the current month that have an impact on the ability of the Contractor to perform its obligations under this Agreement.
l) A description of all incidents wherein the Water quality standards and/or Water quantity requirements were not met, including the follow-up actions recommended by the Contractor to taken to eliminate or reduce the likelihood of re-occurrence.

m) A description of any incidents (hazardous materials emergencies, security breaches, etc.) that adversely impacted Plant operations and Contractor's ability to fulfil its obligations under this agreement.
n) Summary of Contractor worker claims filed, third party claims filed, and updates on the status of existing claims.
o) An update of the Mandatory Parts inventory.
p) Semi-annually, an update of the total spare parts inventory.
q) Any other data or information as requested by the Authority.

(*) RO Membrane Performance

A normalization program shall be provided by the Contractor on the main control console in the control room. The normalization calculation algorithm shall be in accordance with the latest version of ASTM D4516 (Standard Practice for Standardizing Reverse Osmosis Performance Data) and must also be approved by the membrane manufacturer. Most data required for input to the normalization program shall be collected automatically through the programmable logic controller (PLC). The Contractor shall collect all other additional data (if any) and input the values in the PLC software interface program daily.

The Contractor shall consult with the membrane manufacturer to obtain the membrane manufacturer's membrane performance guidelines prior to initiating a cleaning. These guidelines shall include the following information for each array:

a) Normalized permeate flow, percent decrease;
b) Pressure drop over a stage or the system; percent increase;
c) Normalized salt passage (or permeate TDS increase); percent increase.

The Contractor shall monitor the key performance parameters listed above daily to determine if the RO system requires cleaning. Additionally, the following conditions will be graphed daily as a troubleshooting tool and to ascertain the performance of the membrane system:

a) Normalized Salt Passage vs. Time;
b) Normalized Permeate Flow vs. Time;
c) Salt Transport Coefficient vs. Time;
d) Water Transport Coefficient vs. Time; and
e) Normalized Differential Pressure (Delta P) vs. Time.

RO membrane cleaning criteria shall be based on the normalized flux decline of the membrane treatment system.

2.2 Annual Operation Report Requirements

Once per year the walk-through Plant review (as mentioned under 2.1 above) will coincide with a more thorough annual review and preparation of an Annual Operation Report.

Approximately two weeks prior to the annual walk-through Plant review, and not later than thirty (30) days after the completed year's operation, the Contractor shall submit to the Authority one electronic copy of the Contractor's Annual Operation Report. This report shall include, at a minimum:

a) A summary of the information provided in the Monthly Operation Reports, including Total Water quantity (in cubic metres) and Water quality characteristics for parameters specified in Appendix D delivered to the Delivery Point.
b) A summary of environmental and safety regulatory compliance.
c) Updated Annual Operation and Maintenance Plan.
d) An assessment of outstanding issues, including any recommendations for changes to Plant operation or Plant equipment.

The results from the joint Authority / Contractor annual survey will be compiled for use as an annual addendum to the Contractor's Annual Operation Report. Approximately two weeks following the distribution of the addendum, the Authority and the Contractor will hold an Annual Review Meeting during which the results of the joint Authority / Contractor annual survey and the Contractor's comments and responses will be discussed and all other matters of common interest and concern will be discussed and resolved. The Annual Operation Report will be finalized by the Contractor and issued within two weeks of the Annual Review Meeting.

3. OPERATION SERVICE PLAN

The Contractor shall prepare an operations and maintenance plan (Operation Service Plan), which shall be submitted for approval by the Authority.

The Operation Service Plan shall describe the principal aspects of routine and emergency operating procedures, repair and replacement, predictive and preventive maintenance, corrosion protection, and staffing. The Operation Service Plan will be consistent with the Contractor's ability to perform its obligations in accordance with terms and provisions of the Agreement.

The Operation Service Plan will contain as a minimum an overview description of the following:

a) Plan for Day-to-Day Operations of the Plant (Operations Plan);
b) Maintenance, Repair and Replacement Plan (Maintenance Plan);
c) Liquid and Solid Waste Stream Handling and Disposal Plan (Waste Management Plan); and
d) Emergency Management Plan

The Contractor shall provide to the Authority:

a) a draft Operation Service Plan thirty (30) days prior to the anticipated Commencement Date; and
b) a final Operation Service Plan prior to the Commencement Date.

The Contractor shall update and submit to the Authority any material changes to the Operation Service Plan at least sixty (60) days prior to the commencement of each calendar year for the duration of the Term. The Authority may also each year request reasonable updates to the Operation Service Plan.

Specific requirements related to the individual plans, which are integral parts of the Operation Service Plan are presented in the following sections.

3.1 Operations Plan

The Operations Plan shall describe principal procedures for normal, emergency and standby Plant operations to meet the Contractor's obligations under the Agreement, including overall Plant start-up and shutdown during unusual source water quality events or other conditions which require such shutdown (hurricanes etc.). This plan shall include all sampling and analyses procedures and related QA/QC reports.

3.2 Maintenance Plan

The Maintenance Plan shall describe how the Contractor will:

a) Perform predictive and preventive maintenance, repair and replacement activities on all equipment and buildings in accordance with the recommendations of the equipment manufacturer (OEM), Standard Industry Practices and this Agreement.
b) Perform corrective maintenance in such a manner that the equipment operation is not impacted and the performance standards are not threatened.
c) Prepare reports on maintenance, repairs, and replacements of any major equipment components

The maintenance plan must contain a comprehensive proposed maintenance schedule. This schedule will be used for monitoring and reporting requirements.

The Contractor shall develop and implement a comprehensive computer-based maintenance management program that will collect historical data, including an inventory of spare parts, and a description of the repair work performed.

3.3 Waste Management Plan

The Contractor shall prepare a Waste Management Plan describing the quantities, purpose of use. handling, storage and disposal methods for all chemicals, lubricants, fuels and any other hazardous materials used or generated at the Plant. The Waste Management Plan shall include a detailed list of all chemicals and hazardous materials to be used in the Plant, accompanied by relevant Material Safety Data Sheets. The Contractor shall submit a revised list immediately following any change of chemicals to be used in the Plant.

3.4 Emergency Management Plan

The Contractor shall prepare an Emergency Management Plan (EMP). The objective of the EMP is to eliminate or minimize personal injuries or property damage that could potentially be the consequence of an emergency. The EMP must properly handle the situation until the emergency authorities (Fire Department, Ambulance, Police Department, etc.) can arrive to take over an emergency action.

As a minimum, the EMP contents shall address the following issues:

a) Chemical spill reporting procedures and chemical storage, PPE inspection forms, and spill kit and personal protective equipment (PPE) locations;
b) Personnel emergencies;
c) Fire and explosions and fire extinguisher location maps;
d) Pipe, valve, or pump failure;
e) Equipment and process failure;

f) Power failure;
g) Acts of God (hurricanes, wind storms, floods, and earthquakes);
h) Emergency telephone numbers;
i) Records preservations;
j) Chemical storage inventory and monitoring system;
k) Coordinating instructions with public emergency authorities;
l) Troubleshooting guides;
m) Evacuation Plan including evacuation meeting location and first aid trained personnel; and
n) Weather-related emergency procedures (incl. Hurricane Contingency Plan).

APPENDIX B

SCHEDULE OF FEES

Item No.	Reference	Item Description	Unit	Amount
Base Monthly Overheads Fee:				
United States dollar portion				
1	Clause 39 (i)	Fee, for expenses incurred outside the Cayman Islands, expressed in United States Dollars, adjustable for inflation.	US $/month	_____
Cayman Islands dollar portion				
2	Clause 39 (ii)	Fee, for expenses incurred locally, expressed in Cayman Islands Dollars, adjustable for inflation.	CI $/month	_____
Base Quantity Fee:				
United States dollar portion				
3	Clause 43 (i)	Fee, for expenses incurred outside the Cayman Islands, expressed in United States Dollars, adjustable for inflation.	US $/$m^3$	_____
Cayman Islands dollar portion				
4	Clause 43 (ii)	Fee, for expenses incurred locally, expressed in Cayman Islands Dollars, adjustable for inflation.	CI $/$m^3$	_____
Specific Energy Consumption:				
5	Clause 46	Specific Energy Consumption Guarantee of Plant ($ENCON_{spec}$)	kWh/m^3	_____

Contractor's Initials or Stamp :

APPENDIX C

ANALYSIS OF WELL WATER (TYPICAL VALUES)

North Side Feed Wells (combined sample) Biannual Analysis

PARAMETER - BIANNUAL ANALYSIS *(all results in mg/l, unless otherwise stated)*	Sample Date 08-Dec-09	Sample Date 15-Nov-11	Sample Date 12-Aug-13	Sample Date 15-Jun-16	Sample Date 24-Jul-17
Alkalinity	176	170	176	182	174
Aluminum	0.021	<0.005	<0.005	<0.005	<0.005
Ammonia	0.512	0.433	0.305	7.500	1.0
Bicarbonate	215	209	215	222	212
Calcium	640	560	560	-	400
Chloride	18994	18594	18344	17900	19394
Copper	n/d	0.029	0.065	<0.021	0.11
Hardness	6400	6650	6200	4200	6700
Iron	0.062	0.060	0.028	<0.008	0.030
Magnesium	1166	1276	1166	817	1385
Nitrate as N	0.3	0.3	0.2	-	0.0
Orthophosphate	0.110	0.125	0.077	0.090	0.080
Sodium	n/d	n/d	n/d	n/d	n/d
Sulphate	2920	2798	-	2590	n/d
Sulphide	0.064	0.082	0.148	0.350	0.675
Zinc	0.012	<0.009	<0.009	0.010	<0.009
PARAMETER - DAILY ANALYSIS *(all results in mg/l, unless otherwise stated)*					
Total dissolved solids	34790	36111	35156	31260	-
Electrical conductivity *µS/cm*	52100	45255	48410	46020	-
Total chlorine residual	n/d	n/d	n/d	n/d	n/d
Free chlorine residual	n/d	n/d	n/d	n/d	n/d
pH *units*	7.43	7.02	6.98	7.06	-
Total coliform bacteria *cfu/100ml*	1	<20	<1.0	<1.0	<1.0
E. coli cfu/100 ml	BDL	<20	<1.0	<1.0	<1.0
Thermotolerant coliform bacteria *cfu/100ml*	n/d	n/d	n/d	n/d	n/d
Heterotrophic Plate Count *cfu/ml*	n/d	n/d	n/d	n/d	n/d

NOTE: n/d = not done; n/a = not applicable; n/r = not reportable; BDL=Below Detection Limit

APPENDIX D

QUALITY OF PRODUCT WATER

Parameter	Testing Method	Allowable Value (mg/l, unless stated otherwise)	Maximum Value (mg/l, unless stated otherwise)	Notes (1, 2)
pH (units)	Electrometric	6.5 - 7.5	6.0 – 8.0	
Boron	Colorimetric	1.2	2.4	
Sulphide	Methylene Blue	0.01	0.02	(3)
Total Chlorine Residual	Colorimetric	0.00	0.10	(3)
Electrical Conductivity (μS/cm)	Electrometric	400	800	(4)
Total coliform bacteria (cfu/100ml)	Enzyme Substrate	0	1	
E. Coli	Enzyme Substrate	0	1	

Notes:

Note 1: All water quality testing shall be conducted by the Water Authority Laboratory, or by a laboratory accredited for testing of potable water.

Note 2: All other parameters of the product water shall not exceed the values as published in the latest edition of the WHO Guidelines for Drinking Water Quality.

Note 3: The specified sulphide levels of the product water shall be achieved by the proper operation of the air stripper (99.7% or better removal efficiency). However, in the event that additional post-treatment is required to lower the sulphide levels to acceptable levels, these post-treatment methods shall be submitted to the Authority for approval. **Chlorination of the product water shall not be an acceptable method to further reduce the sulphide levels.**

Note 4: Electrical Conductivity meters shall be calibrated with appropriate standards relevant to product water quality.

APPENDIX E

OPERATION OF FEED WATER ABSTRACTION AND BRINE DISPOSAL WELLS

1. All wells shall be tested during the Term at intervals determined by the Authority, at the anticipated peak abstraction (or disposal) rate.

2. The drawdown in the feed water abstraction well at peak abstraction rate shall not exceed three (3) feet (corrected for friction losses in the casing). In the event that the measured drawdown exceeds this maximum, the open hole interval shall be increased.

3. Head build-up in the casing of the brine disposal well(s) at peak disposal rate shall not exceed seven (7) feet (3 psi) to avoid overstressing the annulus seal, which could result in excessive upward leakage of brine. In the event that the measured head build-up (corrected for friction losses in the casing) exceeds this maximum, the open hole interval shall be increased.

4. The Contractor shall ensure that the abstraction of feedwater from the abstraction wells and the disposal of brine and other liquid waste in the brine disposal wells is at all times in compliance with the terms and conditions of the Groundwater Abstraction Licence and Discharge Permits for the Plant.

APPENDIX F

MANDATORY SPARES INVENTORY

General

The Contractor is required to supply to the Authority in any one month an average daily quantity of Water of 8,100 cubic metres per day, which is 90% of the specified design capacity of the Plant, and which meet the requirements of Appendix D.

If the failure of a Plant part would impact on achieving these requirements, then that part is considered a 'Critical Spare'.

If the failure of a part does not impact on the plant achieving this reliability, then the part is considered a Non-Critical Spare.

A failure in a Non-Critical Spare may, however, have other consequences, such as an adverse impact on safety, disruption to the overall functioning or efficiency of the plant, or result in an environmental non-compliance. Some Non-Critical Spares, which include some consumables (e.g., filter cartridges, chemicals) therefore play an important part in the inventory of the Plant and should be stocked as a mitigation measure to any of the above impacts.

Immediately after the Agreement Date the Contractor shall submit a list of suggested Non-Critical Spares, for review by the Authority. Some of the Non-Critical Spares on this list may be included as part of the inventory of Mandatory Spares.

A Mandatory Spare is defined as

(i) a Critical Spare; or
(ii) a Non-Critical Spare where the failure would disrupt the overall functioning or efficiency of the plant; or
(iii) a Non-Critical Spare where the failure of a part would result in a breach of the Contractor's safety or environmental requirements.

All Mandatory Spares shall be purchased and held in store prior to the Commencement Date.

The Contractor shall maintain an inventory of Mandatory Spares throughout the Term.

Mandatory Spares must be held in a suitable storage facility on or near the Site. The storage facility shall be secure and shall be used exclusively for the storage of Mandatory Spares used for this Agreement. The Contractor may use this storage facility to store Non-Critical Spares as well.

Mandatory Spares must be available in such numbers as to ensure that the contractual requirements can be achieved.

Mandatory Spares must be readily available for inspection by the Authority.

Mandatory Spares shall be immediately re-ordered when used and shall be restocked as soon as practical. The Contractor shall provide evidence of having placed an order for any Mandatory Spares that have been used at the Plant.

Critical Spares List

	Qty	NOTES
Submersible Well Pump	1	
Submersible Well Pump Motor	2	
Submersible Well Pump Motor Cable	1	
Submersible Well Pump Motor Cable underwater splice kit	1	
Submersible Well Pump Starter or VFD	1	
High Pressure Pump Motor	1	
High Pressure Pump Coupling	1	
High Pressure Pump Rotating element	1	
High Pressure Pump Bearings and seals	1	
High Pressure Pump Starter or VFD	1	
High Pressure Brine Booster Pump Motor	1	
High Pressure Brine Booster Pump Motor Frame	1	
High Pressure Brine Booster Pump	1	
High Pressure Brine Booster Pump Starter or VFD	1	
2nd Pass Pump Complete (motor, pump, coupling)	1	
2nd Pass Pump Starter or VFD	1	
Product Delivery Pump Impeller	1	
Product Delivery Pump Bearings and seal kit	1	
Product Delivery Pump Coupling	1	
Product Delivery Pump Motor	1	
Product Delivery Pump Starter or VFD	1	
PX ERI Seal Kit	1	All PXQ-X00 spares, as per approved design, will be required to be in stock immediately after replacement of DWEER system
PX ERI Complete Assembly	1	
PX ERI Special Maintenance Tool	1	
Degassifier Blower Motor	1	
Degassifier Blower Belts (complete sets)	2	
Degassifier Blower Impeller Shaft Bearings	1	
Degassifier Blower motor starter or VFD	1	

Critical Spares List (continued)

	Qty	NOTES
Scrubber Recirculation Pump Complete Assembly	1	
Scrubber Recirculation Pump Starter or VFD	1	
Product Delivery Control Valve positioner	1	
HMI computer with control software already installed and up-to-date	1	
PLC one each for both plants with control software pre-installed	2	
One each of all the PLC controller modules including all the communication modules	?	
One each of all the various PLC controller backplanes types	?	
One each of all the various MCC circuit breakers/ fuse types for 480V	1 lot	
Two each of all the various circuit breakers/ fuse types for control system	1 lot	
Two each of all the various relays analog or solid state used in MCC and control panel(s)	1 lot	
Two each of all the various low voltage power supplies used in MCC and control panel(s)	1 lot	
One each of all the various disconnect switches used in MCC and control panel(s)	1 lot	
One each of all the various transformers used in MCC and control panel(s)	1 lot	
Assorted bulbs and panel switches used in MCC and control panel(s)	1 lot	
480V to 120V step down transformer sized for the largest sub panel service	1	
One each of any line or load reactors	1 lot	
Flow Meters 1 each of each flow range for HP & LP	1 lot	
pH sensor, one each for each different pH range required at the total facility	1 lot	
Conductivity sensor, one each for each different range required at the total facility	1 lot	
Pressure sensor two each of each pressure range required	1 lot	
Temperature sensor one each of each range and duty required	1 lot	
Transmitters for sensors above as required if not integral	1 lot	
Valve Actuators 2 each of each size and type (air/elec) throughout both plants	1 lot	
Solenoid valves for air operated valve actuators complete sets	2	
LP Valves 2 each of each size and type throughout both plants	1 lot	
Assorted LP & HP gaskets for the various size pipe connections	1 lot	
Assorted Victaulic type couplings for grooved connections 2-10 each depending on size and BOM quantity in plants	1 lot	
Assorted Sch80 PVC fittings and pipe for repairs	?	

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Critical Spares List (continued)

	Qty	NOTES
Chemical Dosing Pumps 1 each of each flow range for total facility	1 lot	
Membrane vessel complete assembly	2	
Spare membrane vessel internal set (comprising permeate ports, seals, adapters, retaining rings, thrust cones, bearing plate, sealing plate etc.)	6	
Auto Dialler capable of remote operator call out on alarm condition	1	
Skid-mounted or trailer-mounted membrane cleaning system (*)	1	

(*) The Contractor shall furnish a skid- or trailer mounted clean-in-place (CIP) system to allow cleaning of membranes in each RO train in-situ. Cleaning solutions shall be prepared in cleaning solution storage tanks and pumped through the vessels of the train being cleaned. The capacity of the installed cleaning solution storage tanks shall be sufficient to clean all vessels within a single train from a single batch of prepared solution.

APPENDIX G

WATER AUTHORITY WATER RATES (MODIFIED 2018)

Water Authority - Cayman

"Suppliers of the World's Most Popular Drink"

WATER RATES

Rates Modified 2018

Please note that an Energy Adjustment Factor (EAF) is added to the cost of all water metered during the current meter reading cycle. The EAF covers fluctuations in the cost of electricity used to produce the desalinated water supplied to the customer and varies monthly.

Grand Cayman Piped Water

	Price per 1st 12m^3	Price per m^3 over 12m^3
Residential	$4.49	$5.71
Commercial	$5.39	$5.71
Public Authority	$4.87	$5.17
Truckers	$4.49	$4.76
Water Company	$5.39	$5.71

Grand Cayman East End Reservoir Groundwater

	Price per m^3
Truckers	$2.39

Cayman Brac Piped/Trucked Water*

	Price per m^3
Piped Water	$6.12
Trucked Water	$7.66

**Please note that the minimum order for trucked water delivery is 300 US gallons and orders for multiple locations must be made separately. The EAF is also applied to trucked water rates.*

Please also note that a surcharge of $25.00 per delivery will be added to emergency trucked water deliveries (i.e. deliveries that are requested to be made immediately or delivered outside of business hours).

Additional Rates

	20mm (3/4") meter	25mm (1") meter	50mm (2") meter	75mm (3") meter	100mm (4") meter	150mm (6") meter
Monthly Meter Rental Fee	$5.00	$7.00	$15.00	$22.00	$36.00	$58.00
Initial Connection Fee	$80.00	$120.00	$240.00	$360.00	$560.00	$800.00
Reconnection Fee	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00
Security Deposit	$50.00	$75.00	$150.00	$225.00	$350.00	$350.00
Meter Test Fee	$50.00	$50.00	$50.00	$50.00	$50.00	$50.00
Meter Box Replacement Fee	$90.00	$90.00	$90.00	$90.00	$90.00	$90.00
Meter Relocation Fee	$90.00	$90.00	$90.00	$90.00	$90.00	$90.00
Service Transfer Fee	$25.00	$25.00	$25.00	$25.00	$25.00	$25.00

GRAND CAYMAN P.O. Box 1104 Grand Cayman KY1-1102 Cayman Islands Tel: (345) 949-2837 Fax: (345) 949-0094 Email: info@waterauthority.ky www.waterauthority.ky

CAYMAN BRAC P.O. Box 240 Cayman Brac KY2-2002 Cayman Islands Tel: (345) 948-1403 Fax: (345) 948-1404

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APPENDIX H

CARIBBEAN UTILITIES COMPANY (CUC) – DEMAND RATES

CUC
You've got the power

October 2017

Dear Customer,

Re: **Demand Billing - Large Commercial Customers**

The Utility Regulation and Competition Office (OfReg) has approved the introduction of Demand Rates for Large Commercial Customers. This is a standard rate structure for Large Commercial customers in most other markets throughout the world.

The goal of Demand Rates is to fairly allocate variable costs into an energy charge and fixed costs into a demand charge. Currently these fixed and variable charges are recovered in a single energy charge on customers' bills. The peak demand imposed on the system by consumers drives the amount and size of fixed assets in place, and therefore the level of demand charges. Demand Rates will therefore send the right price signal and encourage peak demand management whereby customers focus on using less energy during peak hours by conserving, or by moving energy use to off-peak times such as night time and weekends. Peak demand management may not necessarily decrease total energy consumption, but by reducing peak demand it can be expected to reduce the need for ongoing investments in power plants and transmission and distribution assets. This reduction benefits all consumers and will impact electrical rates in the future.

Demand Rates will be introduced to all Large Commercial class customers in January 2018 and will be done in an incremental manner, that is, CUC will not fully allocate the fixed cost to the Demand Rate immediately but will do so over a period of three years. More specifically, the energy charge on bills that currently includes 100% of demand charges will have 33% of the demand charges removed and allocated to the separate demand charge in year one, 66% in year two, and in the third year the full allocation of demand charges into the Demand Rates. In all cases charges for fuel factor, fuel duty and licence and regulatory fees will remain as separate line items based on energy consumption.

Effective July 2017, bills reflected peak monthly demand in the lower portion of the bill with the meter read. This data is for ***information purposes only***, and allows you to begin to take note of the level of peak demand at your various properties. The demand billing will be multi-faceted and will include rates for the monthly peak and the peak for the past 24 months.

We will be hosting two informational sessions, one in October and another in November and hope that you and representatives of your company can attend. The process will provide increased visibility of your businesses' consumption patterns and will give you more control over your level of expenditure. We feel this rate structure will be beneficial to your organisation and look forward to assisting you so that your team may discover the benefits.

Sincerely,
Your CUC Customer Service Team

INVESTORS IN PEOPLE | Gold Uni-2000

The Environmental Management System of the North Sound Road Power Plant is registered to ISO 14001

Caribbean Utilities Company, Ltd.
457 North Sound Road, P.O. Box 38, Grand Cayman KY1-1101, CAYMAN ISLANDS
Tel: (345) 949-5200, Fax: (345) 945-1218, E-mail: service@cuc.ky
Website: www.cuc-cayman.com

Understanding Electric Demand

CUC
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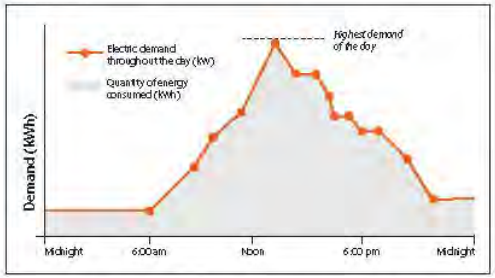
Our mission is to be a leader in the growth of our community by delivering safe, reliable energy services at competitive costs and with respect to the environment while being a model corporate citizen and providing a fair return to our shareholders. We are continuously looking at the way we perform with a view to improve the level of service we provide.

The following information is provided to assist customers in understanding our newest rate structure.

What are Demand Charges?

The existing line item on bills, the Energy Charge is the calculation of the amount of electricity kilowatt-hours (KWh) consumed during the billing period. Demand is the rate at which you consume electricity - or the amount needed to power your business at any given point in time. Your demand charges are based on the highest level of electricity supplied at one time during the billing period and at the time of day it is needed by your business. The diagram below illustrates this.



Consumption is measured in KWh and *demand* is measured in Kilowatts (kW). You can imagine that power (kW) is like your speedometer (current speed), while energy (kWh) is like your odometer. The speedometer can quickly go from zero to sixty and back to zero, but the odometer only slowly counts up: faster if your speed is faster. The speedometer tells you how fast you are going right now (how much power or "*Demand*" you are using right now), while the odometer tells you how far you've gone (how much energy you've "*Consumed*" in total).

We at CUC must be ready to provide the exact amount of electricity you and every other customer needs, at any time, all the time. This electric "demand" varies by customer, by the time of day, and by the day of the year. It requires an electric system built like an eight-lane highway to handle peaks in demand that occur at varying times.

That electric system consists of generating stations, transmission wires and substations on constant standby ready to meet your energy needs. This equipment must be sized to meet the maximum amount of potential electricity that customers may require, or, in other words, the "peak period demand."

The equipment needed to respond to peak demand is extremely expensive. While some commercial customers may need this equipment only intermittently, others need it almost constantly. Most customers fall somewhere in the middle. In order to distribute the costs associated with meeting peaks, utilities utilise separate charges for demand for large commercial customers.

Demand charges are not shown separately on bills for most residential and small commercial customers, but demand costs are built into their energy rates.

Demand Charges vs. Energy Charges

The distinction between demand (kW) metering and energy (KWh) metering can best be illustrated with an example. This example also shows the difference in unit electric costs between an efficient and inefficient user of electricity.

Suppose you operate a building with lighting, cooling and miscellaneous electric equipment. The maximum installed load totals 120 KW. Assume that the demand rate is $9.75 per KW, and the energy rate is $0.1183 per KWh. You are not using the building and have no employees. However, on the first day of each month you turn on all electrical equipment - all 120 KW - for 15 minutes. Afterwards, you shut everything off and leave until the following month.

What will your monthly electric bill reflect? It would note very little energy use, only 30 KWh, (120 KW multiplied by 0.25 hours) and would cost about $3.55 (30 KWh multiplied by $0.1183 per KWh). However, your demand charges are for 120 KW and would cost $1,170.00 (120 KW multiplied by $9.75 per KW). Of course, this is an extreme example of an inefficient user of electricity. It does, however, show the significant difference between energy use in kWh and demand use in kW.

CUC has to invest the same amount of infrastructure for both examples below. This cost is fixed for CUC to meet this demand.

Example #1:

Electric Demand $1,170.00	Electric Consumption $3.55
120 kW x $9.75	30 kWh x 0.1183

Let's consider another example wherein the same building operates on a standard 40-hour week. The monthly energy use increases to 19,200 kWh

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(120 kW multiplied by 160 hours per month), which would cost $2,271.36. However, demand would remain at 120 kW and the cost at $1,170.00.

Example #2:

Electric Demand $1,170.00	Electric Consumption $2,271.36
120 kW x $9.75	19,200 kWh x 0.1183

Recording Demand

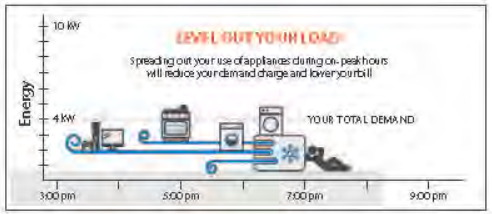
Demand is measured as the average load over a 15 minute period. If a building is using 120 kW for a 15 minute interval, the recorded demand would be 120 kW. If the building was using 120 kW for the first 10 minutes of an interval, and then completely shut down for the next five minutes of the interval, the recorded demand would be 80 kW.

Although the electric meter installed at your premises measures demand over 15 minute intervals, it stores only the highest 15 minute period recorded during the day. This reading is used to compute demand charges on your electric bill (subject to a minimum demand charge explained later in this brochure under "Additional Capacity Charge").

After your monthly demand reading is captured, the demand reading is reset to zero and the meter begins recording for the next monthly period.

You can control your electric costs by staggering the use of different equipment. For example, if you were to simultaneously operate a 45 kW machine and a 75 kW machine, you would record 120 kW on the demand meter. However, if you were to alternately operate these machines, the maximum reading would only be 75 kW because the 45 kW unit only operates when the 75 kW unit is off and the meter only stores the highest demand. With interlocks and controlling devices, it's easy to operate some equipment this way.

Remember, each kW saved in this example is worth $9.75 per month. In this case it amounts to $438.75 per month.



Controlling Demand

Because the demand meter only records *coincidental* demand, it is possible to reduce cooling (air-conditioning) demand by using several units to meet the buildings needs. If air-conditioning units are widely dispersed, they turn on and off at irregular intervals. This limits *coincidental* demand.

Building Energy Management Systems monitor and control services such as heating, ventilation and air-conditioning, ensuring the building operates at maximum levels of efficiency and removing wasted energy usage and associated costs.

Probably the best (and most affordable) way to control electric demand lies within the buildings thermal design. Tight construction, good window design and adequate, but not oversized, ventilation systems all conserve energy. Consequently, smaller equipment can be installed at lower costs and with reduced operation and demand charges.

Additional Capacity Charge

The demand charge rate at CUC is split between the Monthly Demand charge and the Additional Capacity Charge. The Additional Capacity Charge is the maximum recorded demand during any of the preceding twenty-four months. For instance, if a building uses a peak of 120 kW during one of the previous summer months, and the winter peak is 80 kW the additional Capacity Charge will be billed at 120 kW. The Monthly Demand Peak will be billed at 80 kW. Many utilities refer to this as Ratcheted Demand.

The Additional Capacity Charge was created to maintain the expensive infrastructure needed to handle the highest peak demand. Because there is a substantial cost involved in maintaining generators, substations and transformers, utilities and regulators across the world have determined that Ratcheting is the fairest way to bill the customers who create seasonal power peaks. This is even more relevant in the Cayman Islands where more and more of our customers are taking advantage of our sunny weather and implementing solar panels. Significant energy peaks are seen during maintenance periods when this equipment is taken off-line.

What Occurs after an Outage?

Following a power restoration event, the demand by a consumer will be artificially higher since electrical equipment and appliances will have a tendency to be active to compensate for the lack of electricity of the extended outage. For example, air-conditioning equipment will immediately come on to cool.

Likewise, refrigerators and freezers will run to bring their internal temperatures down. CUC has a 'forgiveness period' of 15 minutes programmed into the meters so that our customers are not penalized for their increased demand created by the outage. This may not be a concern for customers who utilise generators during outages.

CUC's Demand Rate Structure

Demand rates will be introduced to all Large Commercial customers in 2018. Large Commercial Customers without Distributed Energy Resources (DER) will have a phased in period of three years. During that time the energy charge will be reduced to a very low rate and the majority of cost recovery will occur through the demand rate and the additional charge rate.

Below is the demand rate structure.

	Large Commercial
Existing Rate	
Monthly Facilities Charge	$153.92
Energy Charge:	
First 30,000 kWh per month	0.1183
Over 30,000 kWh per month	0.0977
New Rates	
Monthly Facilities Charge	$153.92
Energy Charge (all kWh per month)	$0.00327
Monthly Billing Demand per kWh	$9.75
Additional Capacity Charge per kWh	$14.53

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For further information on Demand Rates, please contact our Customer Service Team at 949-5200, via e-mail at service@cuc.ky or visit our website at www.cuc-cayman.com

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Caribbean Utilities Company, Ltd.

Terms of Service

Demand Rates

EFFECTIVE DATE

The Terms of Service herein shall be effective for any applicable bills rendered on or after January 1, 2018 (the "Effective Date").

AVAILABILITY

Electricity service from Caribbean Utilities Company, Ltd. ("CUC" or the "Company") is available to any electric customer (the "Customer") throughout the CUC service territory on the island of Grand Cayman.

APPLICABILITY

A rate structure consisting of a combination of monthly facilities, energy and demand charges (collectively, the "Demand Rates") will apply to certain Customers in different rate classes as follows:

- Rate PR – Demand Rates that apply to Customers in the residential (Rate R) rate class that operate Distributed Energy Resources ("DER"), as defined herein;
- Rate PC – Demand Rates that apply to Customers in the general commercial (Rate C) rate class that operate DER;
- Rate PL – Demand Rates that apply to Customers in the large commercial (Rate L) rate class that operate DER during the initial phase-in period and, thereafter, shall apply to all large commercial Customers; and
- Rate L – Demand Rates that apply to all other Customers in the large commercial (Rate L) rate class during the initial phase-in period. After the initial phase-in period, Rate L and Rate PL will be the same. At that time, all Customers on Rate L will be moved to Rate PL and Rate L will be discontinued.

DISTRIBUTED ENERGY RESOURCES

Distributed Energy Resources ("DER") shall include any Customer's on-site generation from renewable energy resources used to supply some, all or more than the Customer's load. This includes any load that can be served by the Customer's generation but then switched to be served by CUC in the event of an outage of the Customer's generation. This would not apply to emergency generators or other

Caribbean Utilities Company, Ltd.
457 North Sound Road, P.O. Box 38, Grand Cayman KY1-1101, CAYMAN ISLANDS
Tel: (345) 949-5200, Fax: (345) 949-5203, Website: www.cuc-cayman.com

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configurations that are permanently isolated from CUC's grid. This also excludes generation included in the Consumer Owned Renewable Energy ("CORE") program since all of the energy from CORE is subject to a feed-in tariff and is not used to directly offset the Customer's load.

Customer-owned DER shall be subject to capacity limitations at the Customer's site and in total for all Customers, as set by CUC and approved by the regulator. Individual system sizes will be limited to the lesser of 250 kW[2] or the customer's peak demand. The total system wide limit shall be 2,000 kW initially. These individual and system limitations will be reassessed annually and in all cases, individual applications will be reviewed for technical capacity limits on individual transformers and circuits.

METERING

Each Customer on Rate L shall be provided a meter by CUC, at CUC's expense, capable of measuring total energy usage in kWh[1] and monthly peak demand in kW[2] (the "Basic Demand Rate Meter") unless requested otherwise by the Customer as follows. The Rate L Customer may request that CUC install a special meter, at Customer's expense, capable of measuring monthly peak demand based on the time of use (the "TOU Demand Meter").

Each Customer on Rate PR, Rate PC or Rate PL shall be provided a TOU Demand Meter by CUC, at Customer's expense. Each TOU Demand Meter shall also measure total energy delivered to the Customer and total excess energy produced by the Customer's DER, if any. If and to the extent that energy produced by the Customer's DER is greater than the energy consumed by the Customer at any time during the billing month, such excess (the "Excess Energy") shall be purchased by CUC from the Customer at the rate for Excess Energy purchases and shown as a credit amount on the Customer's bill.

RATES

The Demand Rates shall be billed monthly based on a facilities charge, an energy charge and two demand charges, including a monthly demand charge and an additional capacity charge. The initial Demand Rates are subject to future adjustments as set forth herein. As of the Effective Date, the initial Demand Rates for each rate class are as follows:

Monthly Rates	Rate PR	Rate PC	Rate PL	Rate L
Facilities Charge	$5.31	$29.35	$153.92	$153.92
Energy Charge per kWh	0.00333	0.00323	0.00327	0.06997
Monthly Demand Charge per kW	8.63	10.60	9.75	3.25
Additional Capacity Charge per kW	14.56	14.59	14.53	4.84

DETERMINATION OF MONTHLY DEMAND CHARGE

The Monthly Demand Charge shall be equal to the Monthly Demand Charge rate currently in effect times the Customer's Monthly Demand. The Customer's Monthly Demand shall be the maximum hourly demand for the current billing month during the On-Peak Period. The On-Peak Period is defined as

[1] Kilo-Watt-hours.
[2] Kilo-Watts.

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between 11 a.m. and 9 p.m., Monday through Friday, excluding public holidays. For Customers with a Basic Demand Rate Meter, the maximum hourly demand for the current billing month shall be assumed to occur during the On-Peak Period.

DETERMINATION OF ADDITIONAL CAPACITY CHARGE

The Additional Capacity Charge shall be equal to the Additional Capacity Charge rate currently in effect times the Customer's Additional Capacity Requirement. The Customer's Additional Capacity Requirement shall be the greatest of the Customer's Monthly Demand for the current billing month or any of the prior 24 billing months, whether such prior months' Monthly Demands are actual or derived as follows.

As of the first billing month that the Demand Rates are effective for any Customer and continuing until replaced by actual Monthly Demands, the Monthly Demand for the prior 24 billing months shall be derived as follows:

A) For newly-constructed residences or businesses, the Monthly Demand shall be zero for those months prior to the completion of construction.
B) For existing Customer sites, whether billed to the current Customer or a previous Customer at the same site, the Monthly Demand for the prior 24 billing months shall be:
    1) Derived from any meter data available to CUC for that site, or
    2) If no such meter data is available, the current Monthly Demand times 2.00 shall be deemed to have occurred during the billing month 24 months prior to the current billing month.

SALE OF EXCESS ENERGY TO CUC

The Customer's energy usage shall be measured net of the output of the Customer's DER, if any. If such output is greater than the Customer's energy consumption, the energy usage may be negative, reflecting Excess Energy produced but not consumed by the Customer. For any given billing month, the total monthly energy usage will be accumulated separately from the total monthly Excess Energy. The total monthly energy usage will be billed at the energy charge rate and any other applicable rates. The total monthly Excess Energy amount will be multiplied by the lower of:

A) The current Excess Energy Rate plus the current Fuel Charge rate plus the Fuel Duty rate or
B) The comparable energy purchase rate in the most recent Renewable Energy Power Purchase Agreement ("RE PPA").

The result will be a credit on the Customer's bill.

As of the Effective Date, the initial Excess Energy Rate is $0.00259 per kWh.

As of the Effective Date, the most recent RE PPA rate is $0.1428 per kWh.

INITIAL PHASE-IN PERIOD ADJUSTMENTS

For those large commercial Customers without DER (i.e. the Rate L class), the Demand Rates will be phased in as follows: one-third for the first year, two-thirds for the second year and 100% thereafter. Therefore, the demand charges shown above as part of the initial Demand Rates represent one-third of the amounts determined by CUC as part of its cost of service study. The energy charges shown above as

part of the initial Demand Rates have been set to recover the remaining revenue requirement resulting from the reduced demand charges. One year from the Effective Date, the demand charge components of the Demand Rates will be adjusted to two-thirds of the amount determined in the cost of service study, as adjusted for any applicable annual inflation adjustments, and the energy charges will be adjusted to recover the remaining revenue requirements.

Two years from the Effective Date, the demand charge components of the Demand Rates will be adjusted to 100% of the amount determined in the cost of service study, as adjusted for any applicable annual inflation adjustments, and the energy charges will be adjusted to recover the remaining revenue requirements. In each case, the remaining revenue requirements for purposes of setting the energy charges will be based on the pro forma revenues that would have been generated by the Rate L Customers based on energy sales to such Customers for the most recent 12-month period prior to each adjustment and the electric rates in effect prior to the Effective Date, as adjusted for any applicable annual inflation adjustments.

APPLICATION OF THE RATE CAP AND ADJUSTMENT MECHANISM

The new Demand Rates – Rate PR, Rate PC and Rate PL – and the Excess Energy Rate will be considered "Base Rates", as defined in CUC's Transmission and Distribution Licence, and will therefore be subject to an annual inflation adjustment on or about June 1 of each year in accordance with methodology set forth in the licence and subject to the regulator's review and approval. The existing rates – Rate R, Rate C and Rate L – are already designated as Base Rates and will continue as such. With the implementation of the Demand Rates, Rate L will be converted to the demand charge structure shown above.

APPLICATION OF OTHER RATES AND CHARGES

In addition the charge components of the Demand Rates as shown above, Customers on each of the Demand Rates will be subject to a Fuel Charge and a Licence and Regulatory Fee as applicable. The Customer may also be billed for other services or miscellaneous charges subject to regulatory approval.

You've got the power
Caribbean Utilities Company, Ltd.
P.O. Box 38 Grand Cayman KY1-1101

WATER AUTHORITY CAYMAN
C/O OCEAN CONVERSION
PO BOX 30614 KY1-1203
CAYMAN ISLANDS CI -

Statement Date: 05-DEC-18 Billing Class: L
Service Address: 191 BOTANIC RD
Account Number: 123-336176
Due Date: **26-DEC-18** Amount Due: **$127,366.54**
Tel:(345) 938-7087 Cycle: 98-10

Please note finance charges are levied on all bills 60 days or greater in arrears at a rate equal to the Cayman Islands bank's prime lending rate plus 3% per annum. The minimum finance charge is $15.

Failure to pay on or before the due date listed on this bill may result in disconnection. Reconnection fees total CI$ 60.00 per incident.

Please return this portion with your payment.

ELECTRIC STATEMENT

SUMMARY

Last Bill Amount	$128,498.38
Payments	-$128,498.38
Balance Forward	$.00

CURRENT CHARGES/SERVICES

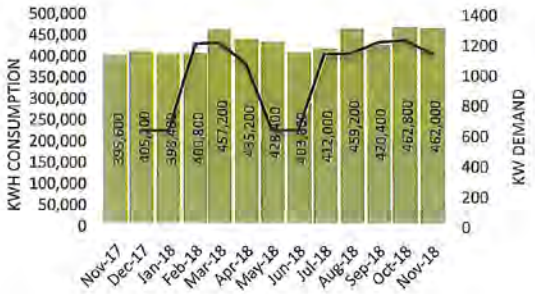
Facilities Charge		$156.69
Energy Charge kWh	462,000	$32,908.26
Lic. & Reg. Fees kWh	461,000	$5,762.50
Mthly Demand Chrg kW	1,124	$4,687.08
Govt. Fuel Duty	462,000	$6,240.23
Fuel Cost	462,000	$62,711.42
Renewable Energy kWh	462,000	$2,671.28
Adl Capacity Chrg KW	1,212	$12,229.08
Total Current Charges		**$127,366.54**

OTHER

TOTAL DUE BY 26-DEC-18	**$127,366.54**

ACCOUNT

Statement Date	05-DEC-18
Cash Deposit	$.00
Service Address	191 BOTANIC RD
Account Number	123-336176



DETAIL

From	To	Days Billed	Energy Units	Meter Number	Current Reading	Previous Reading	Billing Multiplier	kWh Consumed
10/31/18	11/30/18	30	KWH	A09S00000031	72401	71246	400	462,000

From	To	Days Billed	Energy Units	Meter Number	Current Reading	Billing Multiplier	kW Demand
10/31/18	11/30/18	30	KW1	A09S00000031	2.81	400	1,124

Renewable Energy currently comprises 2% of Grand Cayman's Energy Portfolio.

Caribbean Utilities Company, Ltd.
P.O.Box38Grand Cayman KY1-1101, CaymanIslands Tel:345-949-5200, Fax: 345-945-1218 email: service@cuc.ky website: cuc-cayman.com
Please contact our customer service department if you have queries regarding your bill.

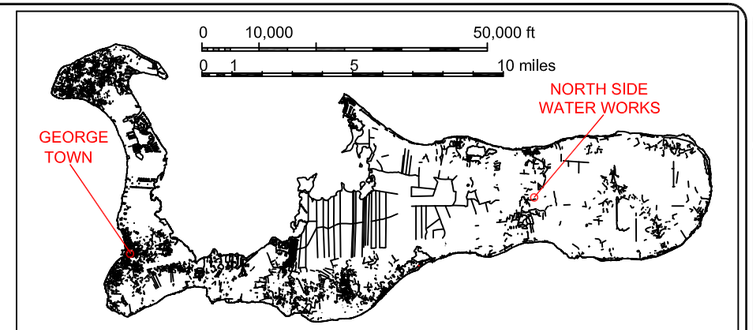
FEED LINE TO RO PLANT

PRODUCT TO POST-TREATMENT

BRINE LINE TO DISPOSAL WELL

0 500ft

N



SITE - GENERAL LOCATION

UNDISTURBED VEGETATION

UNDISTURBED VEGETATION

58A 3

DISPOSAL WELL

58A100

STORAGE TANK CAPACITY 2-MG

PIPE STORAGE RACK

STOREROOM

LOCATION OF DELIVERY POINT

UNDISTURBED VEGETATION

UNDISTURBED VEGETATION

STORAGE TANK CAPACITY 2-MG

TRANSFORMER

STAND-BY GENERATOR

RO PLANT BUILDING

SEPTIC TANK

DEGASIFIER

PUMPING STATION, POST-TREATMENT, OFFICE BLDG.

TRUCKING FACILITY

SEPTIC TANK

PAD

ABSTRACTION WELLS

SUB-DIVISION LINE

58A99

BOTANIC ROAD

UNDISTURBED VEGETATION

58A99

58A 3

58A 99

TO QUEEN ELIZABETH II BOTANIC PARK

SITE PLAN

DATE: 02/01/19
DRAWN BY: CJG
CHECKED: TvZ
PROJECT NO. P137

REV	DATE	BY	DESCRIPTION
0	02/01/19	CJG	ORIGINAL RELEASE – ISSUE FOR TENDER

WATER AUTHORITY – CAYMAN
P.O. BOX 1104
GRAND CAYMAN, KY1–1102
345–949–2837

OPERATING AGREEMENT FOR SWRO PLANT AT NORTH SIDE WATER WORKS

SITE PLAN

WAC PROJECT NO.	
P137	
DRAWING NO.	
C–1	
SCALE	VIEW
SHOWN	
SHEET	REV
	0