

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

PETITION FOR APPROVAL OF
GWA'S THIRD FIVE-YEAR
FINANCIAL PLAN AND BASE RATE
RELIEF

)
) GWA DOCKET 19-08
)
) FY20 RATE DECISION
)
)



Background

GWA and the PUC Consultant Georgetown Consulting Group were able to resolve the issues in this rate case through Stipulations entered into on January 17, 2020.¹ The Parties intend such Stipulations to be a resolution of current issues concerning the rate case. The PUC adopts the ALJ Report filed herein on February 24, 2020, including the *Background*, *Stipulations*, and *Analysis* sections.²

Determinations

1. In accordance with the Stipulations entered into by the Parties, the PUC should approve the Stipulations and order the Parties, GWA and GCG, to fully perform their obligations and duties under the Stipulations. A true and correct copy of said Stipulations is attached hereto as Exhibit "1".
2. On February 12, 2020, GWA and GCG both submitted detailed briefs which more fully explained the Stipulations entered into and the justifications for their provisions. The analyses contained therein adequately explain the bases for the Stipulations. The Parties also presented summaries of their positions at the PUC Work Session on February 19, 2020.
3. At the Work Session scheduled on February 19, 2020, GWA and GCG confirmed on the record that they will adhere to every provision in the Stipulations and carry out their obligations under the Stipulations.
4. The Stipulations were bargained at arms-length by the Parties and represent a full and final resolution of presently pending issues in the rate case. Each of the Stipulations has a reasonable basis and plausible justification. The agreements reached by the Parties are appropriate and supportable. The PUC should approve the Stipulations.
5. GWA and PUC have complied with notice and other requirements of the Ratepayer Bill of Rights. There is a requirement under the Ratepayer Bill of Rights that must be satisfied before the PUC can properly address a petition for rate increase. 12 GCA §12102.2(d) requires that the PUC, in determining approval of any proposed rate increase, take into account the results of required staffing pattern and manpower

¹ Stipulations of the Guam Waterworks Authority and Georgetown Consulting Group on behalf of the Public Utilities Commission of Guam, GWA Docket 19-08, dated January 17, 2020.

² ALJ Report, GWA Docket 19-08, dated February 24, 2020.

studies.³

6. The statute requires that such study compare GWA with at least four (4) comparable utilities in the U.S. Mainland. The statutory requirements were complied with: on February 18, 2020, GCG filed the Guam Waterworks Authority Staffing Study in this Docket.⁴ GCG compared GWA to a cross-section of AWWA water and wastewater utilities. Although GCG found that GWA may be overstaffed in comparison to the mainland utilities, it determined that, for various reasons, the study results were not reliable at the present time.

7. GCG recommends at this time that no adjustment to the staffing related revenue requirements be made for FY 2020-2021. PUC supports this recommendation. GWA is not comparable to mainland water/wastewater utilities, as city or county governments often provide services to such entities (unlike GWA). A more detailed staffing study will be performed to support the FY2022 Comprehensive Review and Update of GWA's financial plan. The study should be completed by March 31, 2021.

8. In its brief, GWA addressed certain procedural aspects of the process concerning the rate case proceedings and was concerned about the length of time that it has taken to resolve the case and the level of scrutiny. GWA submits that time to resolve this case will be 236 days from the filing of its petition on July 6, 2019, implying that there was inordinate delay in resolving the case. This was a complex rate case; the PUC does not find that there was inordinate delay in this proceeding.

9. 12 GCA Sec. 12119 provides: **"Failure of the Commission to act upon a rate request change within one hundred twenty (120) days of final filing shall be deemed a final order denying said rate request change** for the purposes of this Section." (emphasis added). Should GWA insist that the one-hundred-and-twenty-day period expired before the rate case was addressed, the only result would be an order denying any rate relief.⁵

10. Rule 24 (e) of the PUC Rules of Practice and Procedure provides that "the Commission shall act on a utility's application for rate change within one hundred twenty days **after the final filing by the utility of all documentation, including responses to discovery, as may be necessary to support the application;** provided, however that the ALJ shall make the determination of when this "final filing" has occurred." (emphasis added).

11. GWA never requested a determination from the ALJ as to when a "final" filing occurred. There is no "final filing" which commences the running of the 120 days until all responses to discovery are filed. There was a discovery conference between the parties on September 18, 2019. As late as October 16, 2019, GCG was sending discovery responses to GWA's Requests for Information. Furthermore, the Combined Proposed Schedule of the parties provided for filing by GWA of a second set of Requests for Information on January 6, 2020, and GCG responses to GWA's second set of RFI's by January 22, 2020. Under Rule 24 (a), the one hundred and twenty day would not start

³ 12 GCA §12102.2(d).

⁴ Georgetown Consulting Group, Inc., Guam Waterworks Authority Staffing Study, GWA Docket 19-08, filed February 18, 2020.

⁵ 12 GCA Sec. 12119.

to run before October 15, 2019, and arguably not until GCG submitted responses to discovery on January 22, 2020.

12. As GCG outlined at the Work Session on February 19, 2020, GWA did not provide a Rate Study (rate design analysis) or a cost of service analysis in this docket. It has long been established that a rate study and cost of service analysis are fundamental to regulatory rate proceedings. Both GCG and the ALJ indicated on the record in this proceeding that these studies should ordinarily be a part of a petition to increase rates. GCG has indicated that the length of these proceedings was caused by the need to supplement the record with information that GWA did not provide. Although GWA claims that it met all of the filing requirements, in the 2009 rate case, GWA committed to future rate design changes based upon a Cost of Service Study by July 2011.⁶

13. Given the complex number of issues in the case, the length of the proceedings has not been unreasonable. The Financial Plan included three new debt series issues in 2019, 2022 and 2023. The proceeding included such diverse issues as the magnitude of recurring user rate increases, large debt financings, construction budget prioritization, water loss reduction measures and consumer affordability. There were issues concerning alternative debt financing measures, reduction of debt service coverage ratios, and capitalized interest and principal deferral in bond issuances.

14. As to the level of PUC scrutiny in this case, a third GWA rate plan, which would increase rates by 44% over five years, had to be examined carefully and critically. GWA's Twenty-Year Water Resources Master Plan Update proposed a continuing series of rate increases over the twenty-year period of between 4 and 5% annually. Another major concern was that the 58% non-revenue water loss has not improved over many years. Thus, this case justified a high level of PUC scrutiny.

15. The Stipulations embody workable solutions which will provide GWA with sufficient revenues to fund its capital improvement programs. A very detailed plan has been adopted to address the water loss issue.

16. In its Petition, GWA had originally proposed a rate increase of 10% for FY2020 and 8.5% for 2021. The Stipulation now provides that the agreed increase for Water and Wastewater base rates for FY2020 will be 5% and 5% for FY2021. All FY2020-2021 rates are to be applied across-the-board to all rate classes with no change in the lifeline rates during FY2020 or FY2021.⁷

17. These rate revenue increases will be adequate to support GWA operations and maintenance. The two-year cumulative increase has been reduced from 18.5% to 10%, a 45% decrease. The reduction of the original rate request of GWA will result in savings to the ratepayers of \$10 to \$15 million.⁸

18. An issue that GWA raised for the first time in its February 12, 2020, brief, and its presentation before the PUC on February 19, 2020, was that the PUC should grant it "compression" on the rate increase for FY 2020. According to GWA, if a 5% rate

⁶ GWA Docket 09-03, July 27, 2009, GPUC Rate Decision and supporting July 14, 2009, Stipulation, paragraph 8.

⁷ GCG Presentation before the PUC on February 19, 2020.

⁸ Id.

increase were now granted by the PUC effective March 1, 2020, GWA will have been denied the benefit of the increase for the first five months of fiscal year 2020.

19. Based upon approval by the PUC of an FY2020 rate increase effective March 1, 2020, GWA is requesting that an increase of 8.57 percent to basic charges and non-lifeline rates be effective on that date and an FY2021 increase of 2%.⁹

20. GWA never presented this request to GCG in the negotiations of the Stipulations. Larry Gawlik of GCG stated at the February 19, 2020, Work Session that there was no discussion on compression included in the Stipulations. GWA GM Miguel Bordallo admitted during the Work Session that it was an "oversight" not to include "compression" in the Stipulations. Compression is not mentioned or included within the Stipulations. It is not appropriate to impose compression when it was not specifically referenced or agreed to in the Stipulations.

21. The specific provision in the Stipulation which addresses when the FY2020 Base Rate Increase will become effective states as follows: "The rate increase for FY2020 will take place upon the PUC issuing a final order in Docket No. 19-08..."¹⁰ GWA's position would essentially make the rate increase effective October 1, 2019, which is directly contrary to the express language of the Stipulations.

22. In the sentence preceding the above provision, the Stipulations state that the Parties agree to a base rate increase of 5% in FY2020. However, that sentence does not indicate when the base rate becomes effective. The provision previously cited directly addresses that issue and controls general language concerning a 5% increase in FY2020. The Appendix A Proforma also does not specifically address compression nor indicate when the FY2020 proposed rates will go into effect.

23. The PUC should deny GWA's request for compression and adopt the position of GCG. Had the Parties discussed and agreed to "compression" there would have been a Stipulation on this issue. The fact that there was not a stipulation indicates that there was no such agreement. An 8.57% rate increase implemented now, immediately, would not be in the best interest of ratepayers.

24. The target increases now provided for in FY2022 through 2024 are 5.50% for FY2022, 3% for FY2023, and 2.5% for FY2024. However, such rates are "subject to Adjustment."¹¹ The FY2022 through FY2024 rates are "proforma", "based on the best estimates that the Parties currently have." These "proforma" rates will be "subject to redetermination after the analytical studies in FY2021 are completed and the FY 2022 Comprehensive Review and Update of GWA's Financial Plan completed."¹²

----- 25. Rates cannot be set now for FY2022-2024 as there is simply an insufficient record to enable the Parties to set such rates at the present. That is why GWA is being required to conduct the six analytical studies set forth in the Stipulations. -----

⁹ GWA Position Statement on Stipulation, pg. 3.

¹⁰ Stipulations, pg. 7.

¹¹ GWA Presentation to the Consolidated Commission on Utilities, Regular Meeting, January 28, 2019, at p. 64 of the CCU Board Packet.

¹² GCG GPUC Workshop Briefing, pg. 3.

26. The PUC should approve the proposed for FY2020 and 2021 as “just” and “reasonable” pursuant to 12 GCA §§ 12116 and 12118. The rates appear to be based upon a reasonable determination of GWA’s revenue needs and the cost of the CIP program. The agreement of the Parties to reduce the original rate requests indicates that the interests of the ratepayers have been considered and respected.

27. The Water Loss Reduction Program is one of the most significant aspects of the Stipulations. GWA’s Rate petition did not include a defined water loss reduction program for the purposes of reducing water loss levels. The Stipulation deals with the substantial problem of water loss at a level of 55-58% that has adversely affected GWA’s operations for over 40 years.

28. The program includes a comprehensive systemwide water loss reduction assessment and program designed to provide meaningful reductions in water loss volumes (kGal). A water loss reduction plan, including annual loss reduction targets, will be completed and submitted by March 31, 2021, to be considered by PUC in the update to GWA’s Five-Year Plan.¹³ In FY 2020-2021, GWA will include water loss reduction project spending of no less than \$14M.¹⁴ FY2020 and 2021 production volumes will be adjusted based on projected non-revenue water reduction of 2% of actual FY2019 production and 2.75% of FY2020 production respectively.¹⁵ Measures agreed to in the Stipulations will be undertaken to reduce GWA water loss by 20% over the five-year period.

29. The Stipulations address GWA’s Capital Financing process. There are presently two separate debt service coverage ratio calculates applicable to GWA’s debt borrowing: the bond indenture coverage ratio of 1.25x coverage and the PUC 1.75x coverage target pursuant to the PUC’s FY 2005 Rate Order, with the inclusion of Working Capital Reserve fund balances per CCU policy.¹⁶

30. The Parties have agreed that the dual calculations are “uncommon among water system debt issuers”, and that a simpler debt service coverage ratio standard should be adopted.¹⁷ The PUC 1.75x standard may exceed coverage levels required for comparable and even more favorably rated water system issuers.¹⁸ Such a standard is a difficult barrier to meet, and in this case would require tremendous rate increases.¹⁹ Therefore, the Parties both recommend that the CCU and PUC provide any necessary policy changes that will allow for the adoption of a 1.40x debt service coverage ratio.

31. Adoption of this 1.40x standard will end certain confusion that presently exists, and further provide a standard that is easier to apply and is more acceptable in the national credit market.

32. The Parties have further adopted certain agreements as to the Revenue Bond Debt Structure that will be used for the proposed \$134M bond issuance. The first is that the

¹³ Id. at pg. 9.

¹⁴ Stipulations, pg. 9.

¹⁵ Id.

¹⁶ GWA Position Statement on Stipulation, pg. 10.

¹⁷ Id.

¹⁸ Id.

¹⁹ Statement of Larry Gawlik at PUC Work Session on February 19, 2020.

bond issuance will be structured with two years of capitalized interest. There are arguments for and against capitalization of interest. Such capitalization more closely aligns ratepayer benefit from capital projects with their actual availability. Capitalized interest is generally accepted in regulatory settings as a means to align debt payment obligations to asset in-service dates, and thereby nominally matches revenues and expense.²⁰

33. Capitalizing costs may place additional pressure on rates outside the current rate application period.²¹ Such capitalization merely defers principal payments and will thereafter result in a rate bump or increase when principal/interest payments become due.²² However, it is clear that, without such capitalization, there would be a more immediate rate impact, and rates would have to increase to enable the bond debt service to be paid. The PUC should approve capitalization of interest for a period of two-years.

34. Similarly, the Parties assume that principal payments will be deferred for five years with the upcoming bond issuance. This will defer the rate impact. In this case, if principal payments were not deferred, there would be a “rate bump” in FY2022. The purpose of deferral is “rate smoothing.”²³ However, deferral of principal will result in interest being paid on the deferral.²⁴

35. The five-year deferral of principal payments is justified as a part of the overall rate package. Such deferral will avoid an immediate rate impact during this five-year rate period. It is an appropriate part of the overall rate plan that the Parties have crafted.

36. The Parties have also agreed that GWA will explore alternatives to bond financing, such as tax-exempt commercial paper and lines of credit, for future capital borrowing needs. It makes sense for GWA to consider other forms of financing that could reduce the cost of borrowing. These alternatives will require further consideration and approval by CCU, PUC, and possibly the Guam Legislature.

37. There are currently pending negotiations between GWA and USEPA concerning a Consent Decree. GWA will likely agree with USEPA to capital programs and projects with spending commitments that will impact future rate revenue requirements. In the Stipulations, the Parties have agreed that, upon completion of substantive Consent Decree negotiations with USEPA, GWA will provide a detailed briefing on the proposed decree to the PUC. The briefing will outline, among other matters, potential GWA spending commitments that will impact future rate revenue requirements and to provide a comparison to what was projected in GWA’s Five-Year Financial Plan.²⁵ This provision in the Stipulations should be approved.

----- 38. The ALJ and GWA do not presently agree whether GWA is required to obtain prior approval of its settlement agreement with USEPA before entering into the Consent Decree. It is the ALJ’s position that prior PUC approval of such settlement agreement is -----

²⁰ GWA Position Statement on Stipulation, pg. 12.

²¹ Id.

²² Statement of Larry Gawlik at PUC Work Session on February 19, 2020.

²³ Id.

²⁴ Statement of Eric Rothstein at PUC Work Session on February 19, 2020.

²⁵ Stipulations, pg. 11.

required under Guam statute and the GWA-PUC Contract Review Protocol. 12 GCA Sec. 12105 (e)(1) requires PUC approval of any contract or obligation which could increase rates prior to entry into such contract by GWA. Furthermore, the Contract Review Protocol requires prior PUC review of any contract or obligation which exceeds \$1,000,000.

39. This remains an open issue in this Docket. The PUC retains jurisdiction over such issue and reserves the right to later decide whether PUC prior approval of the Consent Decree Settlement is required pursuant to statute and the Contract Review Protocol.

Ordering Provisions

After careful review and consideration of the above determinations, the Report and Recommendations of the ALJ, and the Stipulations and the record herein, for good cause shown, on motion duly made, seconded and carried by the undersigned Commissioners, the Guam Public Utilities Commission **HEREBY ORDERS THAT:**

1. All rulings and orders of the ALJ in this proceeding are confirmed and ratified. All motions not heretofore granted or denied are denied. No other matters currently require discussion.
2. The Stipulations of the Guam Waterworks Authority and Georgetown Consulting Group, on behalf of the Public Utilities Commission of Guam, entered into by the Parties on January 17, 2020 and attached hereto as Exhibit "1", are hereby approved and adopted by the PUC.
3. The Parties are hereby ordered and directed to perform and carry out all obligations and duties set forth in the Stipulations.
4. GWA is awarded water and wastewater base rate increases of 5.0% in FY2020 and 5.0% in FY2021. The rate increase for FY2020 will be effective upon the issuance of this Decision by the PUC. The FY2021 increase will take effect on October 1, 2020. There shall be no change in the "lifeline" rate for FY2020 and FY2021.
5. Based upon the information received by the PUC as of the date of this Decision, the rates proposed by the Parties are "just" and "reasonable" pursuant to 12 GCA §§ 12116 and 12118.
6. GWA and GCG have agreed to "proforma" rates for FY2022, 2023, and 2024. However, such rates are not "final" at the present time. Based upon the studies that GWA has agreed to undertake, and the submission of information required by the Stipulations, the PUC will undertake an FY2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan. The final rates for those fiscal years will be determined by the PUC based upon the results of the studies to be performed.
7. In accordance with the Stipulations, GWA shall undertake various analytical studies to support the FY2022 Comprehensive Review and Update of GWA's Financial Plan and the subsequent annual rate review processes for FY2023 and 2024. The required studies include Demand Forecasting, a comprehensive system-wide Water Loss Reduction program, a Cost of Service/Rate Design

Study, an Affordability Study (concerning the ability of low-income rate payers to afford the rapidly increasing water and wastewater rates), Financing and Alternatives to Bond Issuance, a review of the Capitalized Labor Expense protocol, and a study designed to connect more rate payers to the wastewater system and cesspool/septic tank elimination.

8. On or before May 1, 2021, GWA will file its FY2022 Comprehensive Review and Update to GWA's 5-Year Financial Plan which will compare its forecast to actual performance of GWA revenues and expense categories. Such update will include an analysis of how the Demand Forecast, Water Loss Reduction, Cost of Service study, Affordability study, Financing study and other analyses should be incorporated into the Five-Year Financial Plan.
9. GWA shall complete all analytical studies referenced in the Stipulations and file them with the PUC no later than March 31, 2021, to support a Comprehensive Review and Update of GWA's Financial Plan.
10. GWA shall comply with its agreement to undertake a comprehensive system wide Water Loss Reduction program designed to provide meaningful reductions in annual water loss volumes (kGal). The annual non-revenue water loss of 55-58%, according to GCG, is "the single most important issue confronting GWA." GCG estimates that these water losses cost Guam consumers an excess of \$10-\$12 million annually in terms of variable cost of water system operations. Future investments for oversizing facilities can be avoided by reducing water loss.
11. GWA shall continue its ongoing loss reduction field work with Water Systems Optimization, Inc. GWA will identify water loss reduction projects in accordance with the Stipulations. A Water Loss Reduction Plan, including annual loss reduction targets, will be completed and submitted by GWA to the PUC by March 31, 2021, to be considered in the update of GWA's Five-Year Plan.
12. In FY2020-2021, GWA will include water loss reduction project spending of no less than \$14M.
13. GWA shall adjust its FY2020 and 2021 water production volumes based on projected non-revenue water reduction of 2% of actual FY2019 production and 2.75% of actual FY2020 production respectively. GWA will undertake all measures agreed to in the Stipulations to reduce GWA water loss by 20% over the Five-Year period.
14. GWA shall investigate the availability and relative cost of alternative debt instruments such as letters-of-credit and surety bonds to fund debt service reserves in lieu of bond financing required reserves through debt issuance proceeds. If such options are determined to be viable and economical, GWA shall recommend to the CCU, Legislature and PUC the approval of such option(s) for meeting debt service reserve fund requirements as delineated in GWA's Indenture.
15. GWA shall investigate the availability and relative cost of the use of commercial paper and lines of credit to finance the ongoing capital construction program following issuance of its Series 2020 revenue bonds. GWA shall complete such

activities in a timely manner to allow adjustment to FY2022-2024 rates in conjunction with the FY2022 Comprehensive Review and Update of GWA's Financial Plan. GWA will provide to the CCU and PUC detailed submissions and briefings on all documentation required for the FY2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan. These submissions and detailed briefings on the submissions, and the GWA rate model adjustments, will be provided to the CCU and PUC by May 1, 2021.

16. Both GWA and GCG will support policy changes that create one standard for debt service coverage at 1.40x debt service coverage.
17. The Parties shall use best efforts to revise the CCU policy (Resolution No. 21-FY2014) that establishes a cash reserve for the purpose of meeting PUC's current established Aggregate Debt Service Coverage Ratio of 1.75x. Such revision will mean that net revenues are not supplemented with cash reserves.
18. The Parties will also use best efforts to revise and clarify the PUC Order, Docket 04-01, FY2005 Rate Order, that establishes a minimum 1.75x coverage ratio for setting just and reasonable rates.
19. GWA's Five-Year Financial Plan will be based on a projected fund balance target of not less than \$3 million and a debt service coverage ratio of 1.40x-1.50x.
20. GWA's \$134 million Series 2020 bond issue will be structured with a term of thirty (30) years, two (2) years of capitalized interest, assumed to be issued at an average coupon rate of five percent (5%) with cost of issuance equal to two percent (2%) of par. For the Series 2020 bonds principal payments will be deferred for a five (5) year period.
21. GWA will re-program all existing non-committed bond fund balances (from its past three issues), in an amount of no less than \$2.7 million, to its capital program, subject to the applicable PUC review procedures and will provide a priority consideration in funding with reprogramed funds non-revenue water projects.
22. GWA will use its best efforts to enter into a zero-cost "water exchange" program with Navy. If unable to do so, GWA will prioritize reducing the amount of water purchased from the US Navy and undertake the necessary construction to eliminate Navy water (if supported by a large benefit-cost ratio supporting such construction).
23. GWA will ensure that the new SCADA system is designed to assist GWA in the identification and detection of water losses and the prioritization and targeting of water loss projects.
24. Upon completion of substantive Consent Decree negotiations with USEPA, GWA will provide a detailed briefing on the proposed decree to the PUC. This briefing will outline, among other matters, potential GWA spending commitments that will impact future rate revenue requirements and provide a comparison to what was projected in GWA's Five-Year Financial Plan.

25. The ALJ and GWA do not presently agree as to whether prior PUC approval of the GWA- USEPA Consent Decree Settlement Agreement is required by Guam statute and the Contract Review Protocol. This remains an open issue in this Docket. The PUC retains jurisdiction over such issue and reserves the right to later decide whether PUC prior approval of the Consent Decree Settlement is required pursuant to statute and the Contract Review Protocol.
26. GWA is ordered to pay the Commission's regulatory fees and expenses, including, without limitation, consulting and counsel fees and the fees and expenses of conducting the hearing proceedings. Assessment of PUC's regulatory fees and expenses is authorized pursuant to 12 GCA §§ 12103(b) and 12125(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.
27. PUC will keep this docket open in order to conduct all proceedings referenced in the Stipulation. The ALJ is authorized and directed to oversee such administrative tasks and to issue such administrative orders as may be reasonable and necessary to implement this Decision.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

Dated this 27th day of February, 2020.



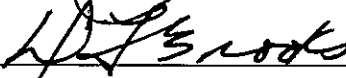
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Michael A. Pangelinan
Commissioner



Doris Flores Brooks
Commissioner

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Commissioner

Peter Montinola
Commissioner

Pedro S.N. Guerrero
Commissioner

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2 **BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

3 **IN RE: PETITION FOR APPROVAL OF) DOCKET NUMBER NO. 19-08**
4 **GWA'S THIRD FIVE-YEAR)**
5 **FINANCIAL PLAN.) STIPULATIONS OF THE GUAM**
6 **) WATERWORKS AUTHORITY AND**
7 **) GEORGETOWN CONSULTING GROUP**
8 **) ON BEHALF OF THE PUBLIC UTILITY**
9 **) COMMISSION OF GUAM**
10 **)**

11 **PROPOSED STIPULATION**

12 *The GUAM WATERWORKS AUTHORITY (hereinafter "GWA") and GEORGETOWN*
13 *CONSULTING GROUP, INC. (hereinafter "GCG") (hereinafter both jointly referred to as the*
14 *"Parties"), hereby agree and stipulate to recommend the following to the GUAM PUBLIC*
15 *UTILITIES COMMISSION (hereinafter "PUC") for approval in Docket No. 19-08:*

16 **PREAMBLE**

17 *Whereas GWA published notice in a local paper of its intent to request PUC approval of*
18 *water and sewer rate increases above existing tariffs on April 6, 2019; and*

19 *Whereas GWA conducted no less than seven (7) public hearings over the subsequent*
20 *weeks, provided notice in the May 2019 customer billing cycle, and gave notice in the paper on*
21 *June 6, 2019; and*

22 *Whereas the Guam Consolidated Commission on Utilities (CCU) under its budgetary*
23 *authority in Public Law 26-76, by Resolution No. 36-FY 2019, approved filing of GWA's Five-*
24 *Year Financial Plan on June 5, 2019; and*

25 *Whereas GWA petitioned the PUC on July 6, 2019 for approval of its Five-Year Financial*
26 *Plan and rate relief and submitted a complete application for rate relief in conformance with*
27 *applicable PUC rules (Part 4: Application for Rate Relief, Rules 19 -21); and*

28 *Whereas, GCG was authorized by the PUC to serve as Technical Consultants on April*
29 *23, 2019 in Docket No. 19-08 to review GWA's Petition and GCG reviewed GWA's Petition and*
30 *rate filing information; and*
31
32

Whereas, the PUC has indicated that it will schedule a public meeting in February 2020 to hear testimony from and receive a briefing on the recommended stipulation between GWA and GCG concerning GWA's Five-Year Financial Plan and rate application; and

Whereas, the Parties jointly recommend that a series of studies be undertaken to provide the PUC critical information upon which to consider adjustments to its FY 2020 – 2024 financial plan; and

Whereas, the Parties jointly recommend that the annual rate review process before the PUC be omitted in FY 2021 and be modified in FY 2022 to provide for a Comprehensive Review and Update of GWA's Financial Plan taking into account the special studies agreed upon in this Stipulation. The Comprehensive Review and Update of GWA's Financial Plan will be used to adjust rates for FY 2022 – FY 2024.

NOW THEREFORE, the Parties Agree to the following Stipulated Provisions which it recommends for approval by the PUC:

STIPULATED PROVISIONS

I. Analytical Studies to be Undertaken to Support the FY 2022 Comprehensive Review and Update of GWA's Financial Plan and subsequent annual rate review processes.

The following studies must be completed by GWA and filed with the PUC no later than March 31, 2021 for consideration by the PUC in support of a **Comprehensive Review and Update of GWA's Financial Plan** (as described further below). The studies will be subject to appropriate review and analysis by each Party. The studies include:

1. Demand Forecasting – GWA must prepare a comprehensive econometric forecast of water sale volumes (kGal) by customer class using a methodology similar to the method used by the Guam Power Authority (GPA) to prepare its electricity sales forecast. GWA may elect to work with GPA in producing this forecast.
 - a. The forecast will consider, as deemed appropriate, variables such as: weather, measures of economic activity, population, construction, water appliance efficiency and conservation measures, tourism and other variables considered relevant.

- b. GWA will consider, as deemed appropriate, modeling the hotel class by individual customer for the largest 10 – 20 customers and meeting with local hotel facility managers about plans such as expansion and water conservation measures and equipment that they plan to install within the next five (5) years. GWA will consider, as deemed appropriate, the relationship between hotel water consumption, tourist arrivals and room occupancy.
- c. Related projections of GWA water production will be prepared specifically to include consideration of demonstrated impacts of GWA's water loss management initiatives.
- d. The study must be completed no later than March 31, 2021 for consideration by the PUC in the FY 2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan.

2. Water Loss Reduction – GWA will advance and expand water loss reduction measures including accelerating planned water line replacements, implementation of district metering areas and other high priority measures.

- a. GWA will undertake a comprehensive systemwide water loss reduction program designed to provide meaningful reductions in annual water loss volumes (kGal) deemed to be economically justifiable. The Parties agree that any water loss reduction project shown in the analytical study to have a benefit-cost ratio above 1.25 will be accelerated to the extent practicable.
- b. GWA will continue its ongoing loss reduction field work with Water Systems Optimization, Inc. (WSO), or other experts, for the purpose of identifying implementable loss reduction measures and appropriate loss reduction targets for its water system. GWA will evaluate calendar year 2020 outcomes of water loss reduction efforts in district metering areas for consideration in making adjustments to its FY 2022 – 2024 water production and variable expense estimates.
- c. GWA will identify water loss reduction projects and the corresponding benefit-cost ratio associated with each project and will rank each water loss reduction project with a benefit-cost ratio above 1.0 from the highest to the lowest. Documentation of water loss reductions achieved for the period and a comprehensive five (5) year (FY 2022 – 2026) water loss reduction plan (inclusive of annual loss reduction targets using appropriate and industry standard metrics)

will be completed and submitted no later than March 31, 2021 for consideration by the PUC in the FY 2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan.

- d. Annually, GWA will provide to the PUC information on results achieved, allowing the PUC to actively monitor and independently verify GWA's progress in water system loss reduction and its undertaking of the water loss reduction projects stipulated to in this proceeding. The annual report will be prepared in a form mutually agreeable by the Parties. These annual updates will include the identification of potential barriers to achievement of loss reduction targets and identification of any corrective actions required to ensure the targets are achieved.

3. Cost of Service/Rate Design - GWA must conduct a water and wastewater cost of service and rate design (COS) study that independently examines the allocation of costs to all customer classes of both the water and wastewater systems employing analysis methodologies as outlined in the American Water Works Association's (AWWA) and Water Environment Federation's (WEF) manuals of standard practice.¹

- a. The COS study will examine GWA's current allocation of costs to its various water and wastewater customer classifications and present alternatives to GWA's current rate designs to support low-income affordability and water conservation objectives. The study must be completed and submitted to the PUC to support the FY 2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan.

4. Affordability – GWA will prepare an evaluation of household water affordability using measures as outlined in the AWWA/NACWA²/WEF report submitted to EPA in May 2019,³ and will prepare Financial Capability Assessment (FCA) information using its recommendations.

- a. In conjunction with GWA's COS study, GWA will prepare an evaluation of options to address low-income water affordability challenges through both the

¹ AWWA Manual of Practice (M1), Principles of Water Rates, Fees and Charges, 7th Edition and WEF Manual of Practice (No. 27), Financing and Charges for Wastewater Systems, 4th Edition.

² National Association of Clean Water Agencies (NACWA).

³ "Developing a Framework for Household Affordability and Financial Capability Assessment in the Water Sector," prepared by Raftelis, Galardi Rothstein Group, and Corona Consulting for the American Water Works Association, National Association of Clean Water Agencies, and Water Environment Federation, completed in April 2019 and submitted to US EPA in May 2019.

1 design of a Customer Assistance Program and revision of its current residential
2 lifeline rate structure. The study will consider alternative low-income Customer
3 Assistance Programs (CAP) and the financing of such programs (intra- and inter-
4 class subsidies) as well as rate design alternatives.

- 5 b. The Parties agree that reasonable efforts will be made to provide for water rates
6 that result in an improvement in the affordability of basic water service and
7 consider cost impacts of all Guam utilities on low-income customers. The study
8 will be completed and submitted no later than March 31, 2021 to the PUC to
9 support the FY 2022 Comprehensive Review and Update to GWA's Five-Year
10 Financial Plan.

11 5. Capital Financing – GWA agrees to pursue legislative and other actions necessary,
12 including working with the PUC and the Guam Economic Development Authority (GEDA) and
13 appropriate financial advisors to enable access to certain financing tools, and to modify selected
14 financial policies. GCG agrees to support GWA's actions before the PUC in pursuing the
15 following enhancements to its financing vehicles:

- 16 a. GWA agrees to investigate the availability and relative costs of alternative debt
17 instruments such as letters-of-credit or surety bonds to fund debt service reserves
18 in lieu of bond financing required reserves through debt issuance proceeds. If
19 determined to be viable and economical, GWA agrees to recommend to the CCU,
20 Legislature and PUC the approval of this option for meeting debt service reserve
21 fund requirements delineated in GWA's indenture.
- 22 b. GWA agrees to investigate the availability and relative costs of the use of
23 commercial paper or lines of credit to finance its ongoing capital construction
24 program following issuance of its Series 2020 revenue bonds. If determined to be
25 viable and economical, GWA agrees to seek necessary approvals to allow GWA
26 the option to employ commercial paper for prospective capital financing.
- 27 c. These activities will be completed in a timely manner to allow adjustment to FY 2022
28 – 2024 rates in conjunction with the FY 2022 Comprehensive Review and Update
29 of GWA's Financial Plan. Given the uncertainty of both the availability and costs
30 of these alternative financing options, the Parties agree that the stipulated FY 2020
31 and FY 2021 rates will not assume the availability of these instruments.
32

1 6. Capitalized Labor – GWA agrees to undertake a review of its current capitalized
2 labor expense protocol to be completed no later than March 31, 2021 to support the FY 2022
3 Comprehensive Review and Update to GWA's Five-Year Financial Plan.

4 7. Cesspool/Septic Tank Elimination – GWA agrees to investigate options to
5 enhance compliance with Title 10, Chapter 48, Toilet Facilities and Sewage Disposal, potentially
6 including legislatively approved transfer of regulatory authority to GWA. GWA will complete
7 its septic tank / cesspool review and analysis, and provide its recommendations to the PUC for
8 review and consideration no later than March 31, 2021.

9 a. GWA will identify all residential facilities with 200 ft. of an existing GWA
10 sanitary sewer line or 1000 ft. of a GWA water well that require specific action
11 steps to be taken by GWA in accordance with Chapter 48. GWA will estimate the
12 potential consumer and GWA investments required, identify potential sources of
13 funding these investments and estimate GWA revenue impacts and expenses of
14 implementation.

15 b. GWA will consider alternative funding mechanisms to assist consumers in
16 connecting to the sewer system, including use of the SDC fund to increase the
17 funds available in the sewer connection revolving fund. GWA will evaluate
18 potential obstacles, if any, to using the SDC fund and outline potential solutions.
19 Other funding mechanisms may be explored as well including private sector
20 financing.

21 c. GWA agrees to notify the CCU and PUC on a timely basis if potential barriers,
22 including funding and procurement issues, may preclude completion of the above-
23 listed studies by the completion dates scheduled and to request necessary
24 modifications and approval of any changes.

25 8 FY 2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan
26 -The review will require GWA to supplement the filings of the studies enumerated below with
27 reporting to the PUC by May 1, 2021 on:

28 a. Forecasted (per the stipulated FY 2020 – 2024 rate plan) versus actual performance
29 by the categories of GWA revenues and expense included in GWA's Five-Year
30 Financial Plan filed with the PUC on July 6, 2019. This variance analysis reporting
31 will address and explain, through narrative and supporting analyses, reasons for
32 variances between forecasted and actual (FY 2020 audited data and FY2021 YTD

1 data) performance greater than 5 percent. PUC may ask for further explanation of
2 other documented variances throughout the review process.

- 3 b. GWA will submit proposed updates to its Five-Year Financial Plan for FY 2022 –
4 2024 and supporting rate model based in part on the findings and recommendations
5 of the studies enumerated above. GWA will provide documentation of how
6 findings of each study were incorporated into GWA's revised financial plan by
7 major categories of GWA revenues and expense.
- 8 c. GWA will provide documentation including, but not limited to a petition, reports,
9 memos, spreadsheets and workpapers outlining how the findings and
10 recommendations of the GWA demand forecast, water loss reduction, cost of
11 service, affordability, capital financing, and other analyses are proposed to be
12 incorporated into the FY 2022 Comprehensive Review and Update to GWA's
13 Five-Year Financial Plan.

14 **The FY 2022 Comprehensive Review and Update to GWA's Five-year Financial Plan**
15 **contemplates an enhanced annual rate review process and specifically does not constitute a new**
16 **GWA rate application. GWA will provide both the CCU and PUC detailed submissions and**
17 **briefings on these submissions and GWA rate model adjustments by May 1, 2021. As noted**
18 **below, GWA will respond to Requests for Information or PUC submittals regarding the studies**
19 **and GWA rate model adjustments on a timely basis throughout the review process. PUC action**
20 **on the FY 2022 Comprehensive Review and Update to GWA's Five-year Financial Plan is**
21 **anticipated by September 2021. The review process is recommended by the Parties to provide for**
22 **full and appropriate consideration of the studies that GWA has agreed to complete by March 31,**
23 **2021.**

24 **II. GWA's FY 2020 – FY 2024 Financial Plan**

25 1. **FY 2020 – 2021 Base Water Rates – By this Stipulation, the Parties agree to the**
26 **proforma results of operations contained in the detailed Attachment A for the period FY 2020 –**
27 **2021 that memorializes the details of projections that the Parties have agreed to recommend to**
28 **the PUC for its review and approval.**

29 2. **FY 2020 – FY 2021 Base Rate Increase Implementation – The Parties agree to the**
30 **stipulated water and wastewater base rate increases of 5.0 % in FY2020 and 5.0% in FY2021.**
31 **The rate increase for FY 2020 will take place upon the PUC issuing a final order in Docket No.**
32

1 19-08 and for FY 2021 will take effect on October 1, 2020. There will be no change to the
2 "lifeline" rate for FY2020 and FY2021.

3
4 3. DSCR – The Parties acknowledge that the projected debt service coverage ratio
5 (DSCR) for FY2020-2021 is below the target of 1.75x the PUC has set to be achieved for
6 ratemaking purposes.

7 4. Policy Changes – The Parties will use best efforts to secure revisions to CCU and
8 PUC policies related to minimum debt service coverage levels:

- 9 a. Revision of the CCU policy (adopted by Resolution No. 21-FY2014) that calls for
10 funding of a Working Capital and Debt Service Reserve that "serves to establish a
11 Cash Reserve for supplementing Net Revenues for the sole purpose of meeting the
12 PUC's currently established ADSCR [Aggregate Debt Service Coverage Ratio]
13 requirement that Net Revenues will be 175%- or 1.75 times annual debt service."
14 The revision would provide for meeting of a PUC minimum ADSCR target based
15 on a calculation consistent with GWA's indenture (and common municipal finance
16 practice) that does not supplement Net Revenues with such reserves.
- 17 b. Revision and clarification of the PUC's order (Regulatory Review of GWA
18 Interim Financial Plan Under Federal Court Order in Civil Case 02-35 - Docket
19 04-01: FY 2005 Rate Order) that a minimum 1.75x coverage ratio is established
20 for purposes of setting just and reasonable rates for GWA (Paragraph 8, p. 5).
- 21 c. The Parties to this stipulation agree to support the approval of both policy changes
22 inclusive of a minimum 1.40x debt service coverage ratio. It is further
23 recommended that as part of CCU and PUC's consideration of alternative debt
24 financing instruments, the PUC debt service coverage policy be reevaluated based
25 on references to credit rating agency medians of comparable and favorably rated
26 debt issuers and consideration of customer affordability of utility services.

27 5. kGal Water Sales – For purposes of the FY 2020 – 2021 revenue requirements, the
28 Parties stipulate that the annual water sales volumes by customer class will not be adjusted from
29 GWA's original July 6, 2019 rate application. Adjustments may be implemented beginning in
30 FY 2022 based on the results of the supporting "Analytical Studies" enumerated above that will
31 be incorporated into the FY 2022 Comprehensive Review and Update to GWA's Five-Year
32 Financial Plan.

1 6. Water Loss Reduction Program – The Parties stipulate GWA will be deploying an
2 aggressive water loss reduction program. For purposes of FY 2020 – 2021, GWA’s water
3 production forecast will be adjusted to reflect anticipated reductions in water losses due to GWA’s
4 expansion and acceleration of water loss reduction measures:

- 5 a. FY 2020 production volumes will be adjusted based on a projected reduction of
6 non-revenue water by 2.00% of actual FY 2019 production (adjusted for partial
7 year implementation, which implementation will begin no later than March 1,
8 2020).
- 9 b. FY 2021 production volumes will be adjusted based on a projected non-revenue
10 water reduction of an additional 2.75% of actual FY 2020 production for a
11 cumulative total of 4.75% (adjusted for FY 2020 partial year implementation).
- 12 c. GWA will include planned water loss reduction project spending for FY 2020 –
13 2021 of no less than \$14 million. GWA will consider the efficacy of alternative
14 project delivery options to effect acceleration of water loss reduction project
15 implementation.

16 7. Labor/Benefits Expenses – The Parties stipulate to the GCG adjustments for FY
17 2020 – 2021 of Personnel Salary and Benefits expenses. Projected annual expense reductions
18 are:

19

20

FY 2020	FY 2021
\$2,248,207	\$1,958,153

21

22

23 8. Variable Operations and Maintenance Expenses – The Parties stipulate to the GCG
24 adjustments for FY 2020-2021 of certain variable (e.g., water production dependent) expenses
25 These adjustments relate to water purchases, salaries and benefits, contractual expenses, and
26 Administrative and General expenses (inclusive of related power expense impacts) and were
27 determined by applying unit savings estimated by GCG to the volume reductions outlined herein.
28 Projected annual expense reductions are:

29

30

FY 2020	FY 2021
\$2,030,877	\$3,703,629

31

32

1 9. Capital and Financing Programs – The Parties have agreed to the following for
2 purposes of development of GWA's Five-Year Financial Plan:

- 3 a. GWA's financial plan will be based on a projected fund balance target (as shown
4 in Attachment A) of not less than \$3 million and a debt service coverage ratio⁴ of
5 1.40x – 1.50x.
- 6 b. GWA's \$134 million Series 2020 bond issue will be structured with a term of
7 thirty (30) years, two (2) years of capitalized interest, and assumed to be issued at
8 an average coupon rate of five percent (5%) with costs of issuance equal to two
9 percent (2%) of par. For the Series 2020 bonds principal payments will be deferred
10 for a five (5) year period.
- 11 c. GWA will re-program all existing non-committed bond fund balances (from its
12 past three issues) in an amount of no less than \$2.7 million to its capital program
13 (see Attachment B), subject to applicable PUC review procedures and will provide
14 a priority consideration to funding with reprogramed funds non-revenue water
15 projects.

16 **III. Potential Capital and Financing Program Revisions**

17 Based on outcomes of the efforts outlined in item number 5 above to be completed by
18 March 31, 2021, the Parties stipulate to the following (which may result in adjustments to GWA's
19 Financial Plan):

- 20 a. GWA's targeted debt service coverage ratio⁵ of 1.40x – 1.50x may be adjusted
21 based on evaluation of potential policy changes enumerated in 4 (c) above.
- 22 b. Use of up to \$50 million in commercial paper or lines-of-credit, to the extent
23 allowed by GWA enabling legislation and if cost-effective, may be used to
24 augment GWA's ongoing construction capital requirements with available capital
25 funds.
- 26 c. GWA will seek to lower the financing cost associated with the capital funding of
27 debt service reserve funds for subsequent borrowings by using letters-of-credit or
28 surety bonds as allowed by GWA enabling legislation.

29
30
31 ⁴ As traditionally calculated as the ratio of net operating expenses divided by scheduled debt service payments per
32 GWA's bond indenture (without adjustment for debt service reserve funds).

⁵ As traditionally calculated as the ratio of net operating expenses divided by scheduled debt service payments per
 GWA's bond indenture (without adjustment for debt service reserve funds).

IV. Water Loss Reduction Targets

The Parties stipulate that the water loss reduction targets for the water system will be based on the work of WSO and GWA who will prioritize each water loss reduction project based on its respective benefit-cost ratio. The Parties agree that the water loss reduction targets should reflect an aggressive approach to water loss management with the objective to have GWA's water loss rates compare favorably with established industry benchmarks as soon as reasonably possible within a twenty (20) year period. The capital investment program will be reprogrammed as necessary starting with projects having the highest benefit-cost ratio to achieve these targets. Further:

- a. GWA will use its best efforts to enter into a zero-cost "water exchange" program with Navy. Absent the ability to enter into a zero-cost exchange program, GWA will prioritize reducing the amount of water purchased from the US Navy or undertake the necessary construction to eliminate Navy water (if supported by a large benefit-cost ratio supporting such construction).
- b. GWA will ensure the new SCADA system is designed to assist GWA in the identification and detection of water losses and the prioritization and targeting of water loss projects.
- c. For the period FY2020-2024 GWA's water loss reduction targets will be as determined through the study to be completed by March 31, 2021 with designated benchmarks to reduce water losses by 20% as compared to its 2019 water loss level and to the median level of comparable water utilities in the US Mainland in less than twenty (20) years from 2019.

V. Consent Decree:

Upon completion of substantive Consent Decree negotiations with USEPA (and lifting of confidentiality restrictions), GWA will provide a detailed briefing on the proposed decree to the PUC. This briefing will outline, among other matters, potential GWA spending commitments that will impact future rate revenue requirements and to provide a comparison to what was projected in GWA's Five-Year Financial Plan.

VI. Requirements of 12 GCA § 12102.2. (d) Staffing Study

1 The Parties acknowledge that the PUC, pursuant to 12 GCA 12102.2 (d), Proposed
2 Public Utility Rate Increases, is required to conduct studies comparing the staffing pattern and
3 manpower levels of GWA and other utilities under their purview to the staffing patterns and
4 manpower levels of at least four (4) mainland utilities providing similar services with a
5 comparable number of customers. The Parties acknowledge that the PUC must, in determining
6 approval of any proposed rate increase, take into account the results of such staffing studies.

- 7 a. GCG conducted a staffing study pursuant to the statute comparing GWA to a large
8 cross-section of water utilities. The results indicate GWA is an outlier when
9 compared directly to this cross-section of mainland water/wastewater utilities
10 participating in the annual AWWA Benchmarking Review and has a greater
11 manpower level than participating utilities.
- 12 b. GCG does not believe the data in the AWWA Benchmarking Review is directly
13 comparable to GWA as many mainland water systems included in the review are
14 part of city or county governments wherein the utility is provided services such as
15 IT, procurement, HR, finance and other services from the county or municipal
16 government.
- 17 c. Any realistic comparison will be difficult given the unique nature of the Guam
18 water system due in part to the inheritance of the legacy systems of the US Navy
19 and the Public Utility Agency of Guam systems. For this reason, we do not believe
20 it appropriate that the staffing study performed be used by the PUC at this time.
- 21 d. The Parties recommends that the Analytical Studies to be Undertaken to Support
22 the FY 2022 Comprehensive Review and Update of GWA's Financial Plan include
23 a more detailed staffing study by the PUC taking into account many of the issues
24 that have surfaced such as: elasticity/affordability/age of the system and resulting
25 system losses that may enable a future smaller and efficient system. This study
26 should be completed by March 31, 2021.
- 27 e. GCG recommends no adjustment to GWA staffing for FY 2020 – FY 2021 is
28 appropriate at this time.


29 **VII. Procedural Provisions**

30
31 The FY 2022 Comprehensive Review and Update to GWA's Five-Year Financial Plan
32 will be an abbreviated proceeding designed to take into consideration all the required studies that
are to be submitted no later than March 31 of 2021 along with any legislative authorization or

1 statutory changes GWA has pursued in furtherance of this stipulation. GWA will file its proposed
2 FY 2022 Comprehensive Review and Update to its Five-Year Financial Plan for PUC review no
3 later than May 1, 2021 – giving the PUC ample opportunity for RFI's and responses to be
4 exchanged prior to the September PUC meeting for approval.

5 **SO STIPULATED this 17th day of January 2020.**

6
7 **GUAM WATERWORKS AUTHORITY**

8
9 BY: 
10 KELLY O. CLARK
11 GWA GENERAL COUNSEL
12

13
14 **GEORGETOWN CONSULTING GROUP, INC.**

15
16 BY: 
17 JAMSHED MADAN
18

19 **ATTACHMENTS A & B**
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GUAM WATERWORKS AUTHORITY

PROPOSED 5-YEAR FINANCIAL PLAN 2020 - 2024

	Projection			
	2020	2021	2022	2023
Basic Charge -Water	5.00%	5.00%	5.50%	3.00%
Lifeline Increase	0.00%	0.00%	0.00%	0.00%
Non-Lifeline Increase	5.00%	5.00%	5.50%	3.00%
Legislative Surcharge	3.60%	3.60%	3.50%	3.40%
Customer Growth	0.50%	0.50%	0.50%	0.50%
Demand Growth	0.00%	0.00%	0.00%	0.00%
OPERATING REVENUES				
Water Revenues	120,007,713	125,418,435	132,046,975	135,575,856
Wastewater Revenues	\$ 73,925,751	\$ 77,436,674	\$ 81,489,096	\$ 83,856,280
Legislative Surcharge	42,401,836	44,115,188	46,589,441	47,746,340
Other Revenues	3,680,126	3,866,573	3,968,438	3,973,236
System Development Charge	431,932	430,737	433,741	432,137
	914,964	929,304	832,509	892,259
Total Operating Revenues	121,354,609	126,778,476	133,313,225	136,900,252
O & M EXPENSES				
Power Purchases	13,360,490	12,985,578	12,437,383	11,464,591
Water Purchases	9,723,387	10,123,306	10,377,505	10,700,149
	23,083,877	23,108,884	22,814,888	22,164,741
Salaries and Benefits				
Intentionally Left Blank	24,627,194	26,814,544	28,847,199	30,089,804
Administrative and General Expenses	12,020,482	12,262,728	12,155,884	12,237,962
Intentionally Left Blank	21,962,670	22,271,032	22,300,621	22,648,171
Depreciation Expense	6,025,390	7,305,994	7,222,396	7,704,680
Intentionally Left Blank				
Retiree Supplemental Annuities/Health care costs				
	3,763,479	3,933,180	4,112,018	4,300,483
Total Operating Expenses	91,483,090	95,696,362	97,453,007	99,145,822
Earnings (Loss) from Operations	29,871,519	31,082,114	35,860,218	37,754,430
Interest Income-Bond 2013,2014 Refunding,2016,2017 Refund	1,350,758	1,539,593	1,303,222	1,397,858
Interest Income-Other Funds	216,573	248,637	210,495	225,235
Interest Income-SDC	25,567	29,850	26,760	27,392
Interest Expense-Bond 2013,2014 Refunding,2016,2017 Refur	(32,105,188)	(31,659,950)	(31,189,350)	(34,944,625)
Interest Expense-BOG	(67,345)	-	-	-
Interest Expense-Commercial Paper			280,000	-
AFUDC			-	-
Amortization of Discount, Premium and Issuance Costs	(403,640)	(276,530)	(298,049)	(326,206)
Grants & other contributions (net of federal expenditures)	39,732,857	39,732,857	33,430,130	8,000,000
Deferred outflows from Pension	(344,114)	(269,263)	(308,689)	(287,976)
Net Income (Loss)	38,276,987	40,426,908	39,316,739	11,846,108
INCREASE (DECREASE) In Capital	38,276,987	40,426,908	39,316,739	11,846,108
BOND DEBT SERVICE	34,175,188	34,229,950	40,934,350	40,929,625
				40,935,013

GUAM WATERWORKS AUTHORITY

PROPOSED 5-YEAR FINANCIAL PLAN 2020 - 2024

	Projection			
	2020	2021	2022	2023
DEBT SERVICE COVERAGE CALCULATION - Section 6.12				
Earnings (Loss) from Operations	29,871,519	31,082,114	35,860,218	37,754,430
Investment Income-Other funds	216,573	248,637	210,495	225,235
COLA	644,877	688,520	735,117	784,867
System Development Charge	(914,964)	(929,304)	(832,259)	(884,691)
Depreciation	21,952,670	22,271,032	22,300,821	22,648,171
Balance Available for Debt Service - Section 6.12	51,780,674	53,360,999	58,273,942	60,520,445
Debt Service Coverage (1.25X) - Section 6.12	1.52	1.56	1.42	1.48
DEBT SERVICE COVERAGE CALCULATION - PUC Debt Ratio				
Balance Available for Debt Service	51,780,674	53,360,999	58,273,942	60,520,445
Transfer - Reserve for O & M	-	-	-	-
Transfer - Reserve for Debt Service	-	-	-	-
2017 Refunding bond savings	-	-	-	-
Available for Debt Service -Reserve for Debt Service	11,217,733	11,217,733	11,217,733	11,217,733
Balance Available for Debt Service - PUC	62,998,408	64,578,733	69,491,677	71,738,178
Debt Service Coverage (1.75X) - PUC	1.84	1.89	1.70	1.75
CASH FLOW STATEMENT				
Net Income (Loss)	38,276,987	40,426,908	39,316,739	11,846,108
Depreciation & Amortization	22,366,310	22,547,962	22,598,670	22,974,378
AFUDC	-	-	-	-
Principal Payments - Bonds	(8,770,000)	(9,270,000)	(9,745,000)	(10,235,000)
Working Capital Change (Increase)Decrease	(878,321)	(542,131)	(932,330)	(625,422)
Principal Payments-BOG	(2,780,552)	-	-	-
Transfer to Trust	-	-	-	-
Deferred outflows from pension	344,114	269,263	306,689	287,976
Gross Bond Proceeds	134,000,000	-	-	85,000,000
Deposit to Bond Construction Fund	(108,925,561)	-	-	(69,094,565)
Deposit to CAP Interest Fund	(13,400,000)	-	-	(8,500,000)
Deposit to Debt Service Reserve Fund	(8,994,419)	-	-	(55,705,415)
Cost of Issuance/Underwriter Discount	(2,680,000)	-	-	(1,700,000)
Loss on Defeasance Bond/Amortization of Discot,	403,640	276,930	298,049	326,206
Premium&issuanceCost	-	-	-	-
Revenue Funded CAPEX	-	-	-	-
Bond Reserve Requirement	-	-	-	-
System Development Charge	500,000	500,000	500,000	(449,399)
Working Capital Reserve for CAPEX/PAYGO	(17,000,000)	(12,400,000)	(17,500,000)	(15,000,000)
Working Capital Reserve for O & M	-	-	-	-
Working Capital Reserve for Debt Service	(39,732,857)	(39,732,857)	(33,430,130)	(8,000,000)
Grants and Contributions	6,700,000	6,700,000	-	4,250,000
Transfer from Capitalized Interest Fund	-	-	-	-
Prior Year Adjustment & Loss on Asset Disposal/Invty writedown	-	-	-	-
Cash Surplus (Deficit)	(570,680)	776,075	1,412,686	3,824,247
Beginning Balance	4,962,086	4,391,406	5,167,481	6,580,167
Ending Balance	\$ 4,391,406	\$ 5,167,481	\$ 6,580,167	\$ 10,404,414

FY2020	FY2021	FY2022	FY2023	FY2024	Subtotal By Project
Total	Total	Total	Total	Total	FY20-FY24

GWA Cat GCG Cat Project # Project Description

PW	1	PW 09-09	Water Reservoir Internal/External	0	0	0	0	0	-
PW	0	PW 05-08	Barrigada Tank Repair/Replacement	0.000	0.000	0.000	0.000	0.000	-
PW	1	PW 09-11	Water System Reservoirs 2005 Improvements	27891	1000	1000	1000	0	30,891
PW	1	PW 11-02	Ugum Water Treatment Plant Reservoir	7500	0	0	0	0	7,500
PW	1	PW 12-04	Agana Heights & Chaot Tanks	0	0	0	0	0	-
PW	1	PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1	0	0	0	0	0	-
PW	1	PW 12-06	Tank Replacement Piti & Hyundai	6500	0	0	0	0	6,500
PW	1	MP-PW-Tank-22	Existing Tank Inspections	150	0	0	0	0	150
PW	1	MP-PW-Tank-23	Recurring Tank Inspections	200	200	214	214	214	1,042
WW	1	WW 11-03	Baza Gardens STP Replacement	0	550	0	0	0	550
WW	1	WW 11-08	Agat/ Santa Rita STP Replacement	0	0	0	0	0	-
WW	1	WW 12-01	Northern District WWTP Primary Treatment Upgrades	0	0	0	0	0	-
WW	1	WW 12-07	Umatac Merizo STP Replacement	0	0	0	0	0	-
Subtotal GCG Cat = 1 "Court Order Projects"				42,241	1,750	1,214	1,214	214	46,633

WW	2	WW 05-04	Wastewater System Planning	150	0	0	0	0	150
WW	2	WW 09-01	Lift station upgrades	1200	1000	0	0	0	6,491
WW	2	WW 09-06	Wastewater Collection System Repl/ Rehabilitation	2000	2000	0	2000	2000	8,000
WW	2	WW 17-02	Northern District WWTP Secondary Treatment Upgrades	0	0	0	0	0	-
WW	2	MP-WW-Pipe-01	Gravity Pipe Rehabilitation/Replacement Program	170	2000	5346	750	6186	14,452
WW	2	MP-WW-Pipe-02	Barrigada Pump Station Pipe Rehabilitation/Replacement	0	0	411	3218	0	3,629
WW	2	MP-WW-Pipe-03	Route 1 Piti Pipe Rehabilitation/Replacement	2340	0	0	0	0	2,340
WW	2	MP-WW-Pipe-04	Southern Link Pump Station Pipe Rehabilitation/Replacement	657	0	0	0	0	657
WW	2	MP-WW-Pipe-05	Agana Heights Pipe Replacement	0	0	169	2500	0	2,669
WW	2	MP-WW-Pipe-06	Northern District Route 1 Capacity Replacement - Phase 1	0	0	0	0	1169	1,169
WW	2	MP-WW-Pipe-11	Route 16 Capacity Replacement	0	0	0	0	571	571
WW	2	MP-WW-Pipe-12	Barrigada Capacity Replacement	0	0	0	0	47	47
WW	2	MP-WW-Pipe-17	Mamajanao Capacity Replacement	400	1300	2574	0	0	4,274
WW	2	MP-WW-Pipe-21	Baza Gardens Capacity Replacement - Phase 1	0	0	0	0	320	320
WW	2	MP-WW-Pipe-24	Umatac-Merizo Capacity Replacement	0	0	0	0	207	207
WW	2	MP-WW-Pipe-25	Piping Near Bayside Lift Station	0	2000	0	250	0	2,250
WW	2	MP-WW-Pipe-26	Finile Drive Rehabilitation - Agat	813	0	0	0	0	813
WW	2	MP-WW-MH-01	Manhole Rehabilitation Program	350	0	350	0	350	1,050
WW	2	MP-WW-FM-01	Force Main Rehabilitation/Replacement Program	0	100	1458	0	120	1,678
WW	2	MP-WW-FM-02	Replace Yigo Lift Station Force Main	0	200	1829	0	0	2,029
WW	2	MP-WW-FM-03	Route 1 Asan Force Main Rehabilitation/Replacement	2124	0	0	0	0	2,124
WW	2	MP-WW-FM-04	Hagåtña WWTP Force Main Rehabilitation/Replacement	6689	0	0	0	0	6,689
WW	2	MP-WW-Pump-01	Lift Station Rehabilitation/Replacement Program	2120	6500	982	6124	2420	18,146
WW	2	MP-WW-Pump-02	Tumon Basin - Fujita Lift Station Analysis	7923	3000	0	0	0	10,923
WW	2	MP-WW-Pump-03	Replacement of Former Navy Pump Station (Donut Hole)	1301	0	0	0	0	1,301
WW	2	MP-WW-WWTP-08	Northern District WWTP Completion	0	7500	7800	0	0	15,300
WW	2	MP-WW-Misc-01B	Update Wastewater Collection System Model (Continued)	100	0	100	0	200	400
WW	2	MP-WW-Misc-02	I/I and SSES Assessments	150	0	0	400	0	550
WW	2	DoD-01	NDWWTP Secondary Treatment Capacity 12MGD	2500	0	0	0	0	2,500
MISC	2	MP-Gen-Misc-08	General Plant Improvements	1000	500	200	200	500	2,400

GWA Cat	GCG Cat	Project #	Project Description	FY2020	FY2021	FY2022	FY2023	FY2024	Subtotal By Project
				Total	Total	Total	Total	Total	FY20-FY24
Subtotal GCG Cat = 2 "Consent Decree Projects"				31,987	26,100	21,219	17,442	16,381	113,129

PW	3	PW 05-09	Leak Detection	0	500	0	0	100	600
PW	3	PW 05-10	Potable Water System Planning	0	500	0	0	0	500
PW	3	PW 09-03	Water Distribution System Pipe Replacement and Upgrades	500	1000	2250	1750	2250	7,750
PW	3	PW 14-01	Fire Hydrant Replacement Program	0	0	500	0	500	1,000
PW	3	MP-PW-Pipe-01	Astumbo Zone Piping	0	0	368	4482	0	4,850
PW	3	MP-PW-Pipe-04	Hyundai Well Piping	500	0	0	0	0	500
PW	3	MP-PW-Pipe-05	Kaiser Zone Looping	300	0	0	0	0	300
PW	3	MP-PW-Pipe-06	Mangilao Pressure Zone Realignment	300	0	0	0	0	300
PW	3	MP-PW-Pipe-07	Mataguac BPS Suction Piping	0	500	0	0	0	500
PW	3	MP-PW-Pipe-09	Yigo, Santa Rosa Zone Realignment	0	0	178	2164	0	2,342
PW	3	MP-PW-Pipe-10	Miscellaneous Piping Projects	100	100	694	0	0	894
PW	3	MP-PW-Pipe-11	Miscellaneous Piping Connections	100	100	194	0	0	394
PW	3	MP-PW-Pipe-12	Rehabilitation and Replacement Program	1000	1000	2500	3400	2000	9,900
PW	3	MP-PW-Pipe-13	2-Inch Pipe Replacement Program	2730	1200	1750	1750	1750	9,180
PW	3	MP-PW-Pipe-14	Asbestos Cement Pipe Replacement Program	0	0	3850	3850	3850	11,550
PW	3	MP-PW-Pipe-15	PRV Rehab and Replacement	1000	1450	1000	1468	1468	6,386
PW	3	MP-PW-Pipe-16	Valve Exercise, Repair, and Replacement Program	250	0	250	0	250	750
PW	3	MP-PW-Pipe-17	Cross Island Highway Piping	0	100	1401	0	0	1,501
PW	3	MP-PW-BPS-01	Rehabilitate and Replace BPSs	409	150	150	150	150	1,009
PW	3	MP-PW-BPS-02	Nimitz Hill Upper BPS	48	0	0	0	0	48
PW	3	MP-PW-Misc-02	Master Meter Implementation and Ongoing Meter Replacement	500	250	734	734	734	2,952
PW	3	MP-PW-Misc-03	Hydrant Condition Assessment and Maintenance	0	0	970	970	970	2,910
PW	3	MP-PW-Misc-05	Leak Detection Assistance	250	0	0	0	0	250
Subtotal GCG Cat = 3 "NRW Projects"				7,987	6,850	16,789	20,718	14,022	66,366

PW	4	PW 09-01	Ugum Water Treatment Plant Intake	0	500	700	0	0	1,200
PW	4	MP-PW-SWTP-01	Ugum SWTP River Intake Cleaning Project	0	0	380	0	0	380
PW	4	MP-PW-SWTP-02	Ugum SWTP Intake Modifications	1000	0	174	0	0	1,174
PW	4	MP-PW-SWTP-03	Ugum SWTP Reliability Improvements	1000	0	150	0	0	1,150
PW	4	MP-PW-SWTP-04	Ugum SWTP 7-Year Improvement Project	0	0	0	0	3168	3,168
PW	4	MP-PW-Well-05	Wellhead Protection Program	350	0	0	660	0	1,010
PW	4	MP-PW-Well-06	Well Repair Program	500	250	1500	1274	1274	4,798
PW	4	DoD-3	Rehabilitation and New NGLA Monitoring Wells	4000	0	0	0	0	4,000
WW	4	MP-WW-Pipe-27	Septic/Cesspool System Reduction Program	0	0	350	3000	5238	8,588
WW	4	MP-WW-WWTP-04	Pago Socio WWTP Pump Station Conversion	0	0	1700	1000	0	2,700
WW	4	MP-WW-WWTP-09	Ocean Outfall Inspection Program	150	0	0	0	0	150
WW	4	MP-WW-Misc-03	Miscellaneous Wastewater Improvements	0	200	1500	1000	0	2,700
WW	4	MP-WW-Misc-04	Fats, Oils, and Grease Study	150	0	0	0	0	150
MISC	4	MC 05-01	Laboratory Modernization	0	0	0	0	0	-
MISC	4	MP-Gen-Misc-09	Security and Resilience Program	100	100	200	100	100	600
Subtotal GCG Cat = 4 "Env-Safety Compliance Projects"				7,250	1,050	6,654	7,034	9,780	31,768

PW	5	PW 05-13	Deep Well Rehabilitation	1538	0	4000	0	0	5,538
PW	5	PW 05-14	New Deep Wells at Down Hard	500	0	0	0	0	500

GWA Cat	GCG Cat	Project #	Project Description	FY2020		FY2021		FY2022		FY2023		FY2024		Subtotal By Project FY20-FY24
				Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
PW	5	PW 05-15	Rehabilitation of Asan Springs	550	0	0	0	0	0	0	0	0	0	550
PW	5	PW 09-02	Water Wells	1500	1400	0	0	0	0	2000	0	0	0	4,900
PW	5	MP-PW-Well-03	Capacity Enhancement – Well Exploration Program	0	0	0	0	500	0	0	0	1188	0	1,688
PW	5	MP-PW-Well-04	Capacity Enhancement – Well Development and Construction Program	0	0	0	0	379	4622	0	0	0	0	5,001
WW	5	WW 17-01	Wastewater Sewer System Expansion	0	0	0	0	0	0	0	0	0	0	-
WW	5	DoD-02	Northern Systems Wastewater System	6000	0	0	0	0	0	0	0	0	0	6,000
MISC	5	MC 09-01	General Plant Improvements / Water	0	100	500	800	500	1000	1000	1000	1000	1000	2,400
Subtotal GCG Cat = 5 "Capacity Projects"				10,088	1,500	5,379	7,422	2,188	26,577					
PW	6	PW 05-06	Water Booster Pump Station	1200	700	300	2000	0	0	0	0	0	0	4,200
PW	6	PW 05-07	Meter Replacement Program	0	0	0	0	0	0	0	0	0	0	-
PW	6	PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	0	0	0	0	0	0	0	0	0	0	-
PW	6	PW 05-16	Master Meters	0	0	0	0	0	0	0	0	0	0	-
PW	6	PW 09-04	Pressure Zone Realignment / Development 2005 Improvements	561	0	0	0	0	0	0	0	650	0	1,211
PW	6	PW 12-01	Water Audit Program & Water Loss Control Plan	0	0	0	0	0	0	0	0	0	0	-
PW	6	MP-PW-Pipe-02	Route 1 Astumbo Zone Piping	0	0	0	0	0	545	3324	0	0	0	3,869
PW	6	MP-PW-Pipe-03	Harmon Cliffline Piping to Route 1	0	0	0	0	0	424	0	0	0	0	424
PW	6	MP-PW-Pipe-08	Nimitz Lower BPS Piping	0	0	0	0	0	121	1469	0	0	0	1,590
PW	6	MP-PW-BPS-03	Route 15 BPS	0	0	0	0	0	0	0	0	86	0	86
PW	6	MP-PW-Well-01	Well Rehabilitation Program	400	3500	2308	5368	440	1518	0	0	0	0	12,016
PW	6	MP-PW-Well-02	Well Equipment Overhaul Program	0	0	1000	0	0	0	0	0	0	0	2,518
WW	6	WW 09-11	WWTP Priority 1 Upgrades	0	0	0	0	0	0	0	0	0	0	-
EE	6	EE 09-02	Electrical Upgrade - Water Wells	90	0	0	0	0	0	0	0	0	0	90
EE	6	EE 09-04	Electrical Upgrade -Water Booster	150	0	0	0	0	0	0	0	0	0	150
EE	6	EE 09-05	Electrical Upgrade - Other Water	100	0	0	0	0	0	0	0	0	0	100
EE	6	EE 09-07	SCADA Improvements – Phase 2	45	0	0	0	0	0	0	0	0	0	45
EE	6	EE 09-08	SCADA Improvements – Phase 3	125	0	0	0	0	0	0	0	0	0	125
EE	6	EE 09-09	SCADA Improvements – Phase 4	0	0	0	0	0	0	0	0	0	0	-
EE	6	MP-Gen-EE-01	SCADA Implementation Phase A2 – Initial Project Completion	2000	2600	1500	2600	2600	2600	2600	2600	2600	2600	11,300
EE	6	MP-Gen-EE-02	SCADA Implementation Phase B – Additional Sites	0	0	0	0	0	600	600	600	600	600	1,200
EE	6	MP-Gen-EE-04	SCADA System Improvement Program	0	0	0	0	0	0	0	0	330	0	330
MISC	6	MC 15-01	Information Technology Intergration Improvements	0	100	500	500	500	500	500	500	500	500	1,600
MISC	6	MP-Gen-Misc-01	GWA Systems Planning	700	500	100	250	1000	1000	1000	1000	1000	1000	2,550
MISC	6	MP-Gen-Misc-04	Information Technology Improvements	5400	200	100	100	100	200	100	200	200	200	6,000
MISC	6	MP-Gen-Misc-05	GWA Infrastructure Improvements	500	2000	0	250	0	250	0	250	0	0	2,750
MISC	6	MP-Gen-Misc-07	Mobile Equipment Replacement Program	800	200	100	100	100	400	100	400	100	400	1,600
Subtotal GCG Cat = 6 "Efficiency Projects"				12,071	9,800	5,908	12,858	15,117	55,754					
PW	7	MP-PW-Misc-01	South Guam Water Supply Study	200	0	0	0	0	0	0	0	0	0	200
PW	7	MP-PW-Misc-04	OneGuam Program	50	50	50	50	50	50	50	50	50	50	250
MISC	7	MP-Gen-Misc-02A	WRMP Update (Comprehensive Update)	0	0	100	0	0	0	0	0	0	0	100
MISC	7	MP-Gen-Misc-02B	WRMP Update (Interim Update)	200	0	0	0	0	0	0	0	0	0	200
MISC	7	MP-Gen-Misc-03	Surveying and Property Delineation	0	250	250	250	250	0	0	0	0	0	750
MISC	7	MP-Gen-Misc-06	GPWA Fleet Maintenance Facility	0	0	500	0	500	0	0	0	0	0	500
Subtotal GCG Cat = 7 "Discretionary Projects"				450	300	900	300	50	2000					

GWA Cat	GCG Cat	Project #	Project Description	FY2020		FY2021		FY2022		FY2023		FY2024		Subtotal By Project FY20-FY24
				Total		Total		Total		Total		Total		
			Subtotal GCG Cat = 1 "Court Order Projects"	42,241		1,750		1,214		1,214		214		48,847
			Subtotal GCG Cat = 2 "Consent Decree Projects"	31,987		26,100		21,219		17,442		16,381		135,551
			Subtotal GCG Cat = 3 "NRW Projects"	7,987		6,850		16,789		20,718		14,022		72,797
			Subtotal "All Other Projects"	29,859		12,650		18,841		27,614		27,135		136,454
			Grand Totals by Year	112,074		47,350		58,063		66,988		57,752		342,227