



**BEFORE THE PUBLIC UTILITIES COMMISSION OF GUAM**


**IN RE: PETITION FOR APPROVAL OF  
GWA'S THIRD FIVE-YEAR FINANCIAL  
PLAN (BASE RATE INCREASES)**

**GWA DOCKET 19-08**

**OFFER OF DIRECT TESTIMONY OF BRIAN C. COLLINS**

The Department of the Navy (Navy) hereby offers the direct testimony of Brian C. Collins on behalf of the Navy, attached hereto as Exhibit "A".

Dated this 6th day of August 2021.

  
ODOCA.CHRISTOPHER.R.15468  
OPHER.R.15468  
37684  
Digitally signed by  
ODOCA.CHRISTOPHER.R.1  
546837684  
Date: 2021.08.06 07:59:04  
+10'00'  
Christopher R. Odoca  
Assistant Counsel, NAVFAC Marianas

# EXHIBIT

## “A”



**BEFORE THE  
GUAM PUBLIC UTILITIES COMMISSION**

\_\_\_\_\_  
**IN RE: PETITION FOR APPROVAL  
OF GWA'S THIRD FIVE-YEAR  
FINANCIAL PLAN (BASE RATE  
INCREASES)**  
\_\_\_\_\_

**GWA Docket 19-08**

Direct Testimony of

**Brian C. Collins**

On behalf of

**The United States Department of the Navy**

August 6, 2021



Project 11138

BEFORE THE  
GUAM PUBLIC UTILITIES COMMISSION

\_\_\_\_\_  
IN RE: PETITION FOR APPROVAL )  
OF GWA'S THIRD FIVE-YEAR )  
FINANCIAL PLAN (BASE RATE )  
INCREASES) )  
\_\_\_\_\_

GWA Docket 19-08

Direct Testimony of Brian C. Collins

1    Q    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2    A    Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,  
3        Chesterfield, MO 63017.

4    Q    WHAT IS YOUR OCCUPATION?

5    A    I am a consultant in the field of public utility regulation and a Principal of Brubaker &  
6        Associates, Inc., energy, economic and regulatory consultants.

7    Q    PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

8    A    This information is included in Appendix A to my testimony.

9    Q    ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

10   A    I am appearing on behalf of The United States Department of the Navy ("Navy"). Our  
11        firm is under contract with Navy to perform cost of service, rate design and related  
12        studies. Navy represents the Department of Defense and all other Federal Executive  
13        Agencies in this proceeding.



1 Q HAS YOUR FIRM PREVIOUSLY PARTICIPATED IN REGULATORY  
2 PROCEEDINGS INVOLVING GUAM WATERWORKS AUTHORITY ("GWA") AND  
3 THE DETERMINATION OF THE RATES TO BE CHARGED TO NAVY?

4 A Yes. Our firm has participated in several regulatory proceedings related to GWA.

5 In addition, our firm has also been active in several Guam Power Authority  
6 ("GPA") proceedings. Navy has been an active participant in the development of the  
7 cost of service and rate design provisions of the Utility Services Contract, and its  
8 predecessor, the Customer Service Agreement.

9 **Summary**

10 Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

11 A My testimony responds to GWA's proposed wastewater class cost of service  
12 ("CCOS"), proposed wastewater class revenue allocation and rate design.

13 Q DOES THE FACT THAT YOU MAY NOT HAVE ADDRESSED A PARTICULAR  
14 REVENUE REQUIREMENT OR ALLOCATION ISSUE IN YOUR TESTIMONY  
15 MEAN THAT YOU ARE IN AGREEMENT WITH GWA?

16 A No. The fact that I have not addressed a particular issue should not be interpreted to  
17 mean that I am necessarily in agreement with GWA.

18 Q PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

19 A My findings and recommendations are as follows:

- 20 1. Based on my review of GWA's proposed wastewater CCOS study, Navy  
21 does not oppose the use of the study as a guide for class revenue  
22 allocation.

2. Based on the results of GWA's wastewater CCOS study, I recommend that Navy's rate class be moved to its specific wastewater class cost of service as determined by GWA.
3. The CCOS would result in a cost-based volumetric rate of \$12.18 per Kgal for Navy, as opposed to the volumetric rate of \$12.80 per Kgal recommended by GWA for Navy.
4. If the Guam Public Utilities Commission approves a lower revenue requirement than requested by GWA, Navy's approved cost-based rate of \$12.18 per Kgal would be adjusted downward proportionally.

### **Cost of Service Principles**

**Q     COULD YOU PLEASE EXPLAIN THE RATEMAKING PROCESS AND THE DESIGN OF RATES?**

**A**     The ratemaking process has three steps. First, we must determine the utility's total revenue requirement and the extent to which an increase or decrease in revenues is necessary. Second, we must determine how any increase or decrease in revenues is to be distributed among the various customer classes. A determination of how many dollars of revenue should be produced by each class is essential for obtaining the appropriate level of rates. Third, individual tariffs must be designed to produce the required amount of revenues for each class of service and to reflect the cost of serving customers within the class.

          The guiding principle at each step should be cost of service. In the first step, determining revenue requirements, it is universally agreed that the utility is entitled to a revenue increase only to the extent that its actual cost of service has increased. If current rate levels exceed the utility's revenue requirement, a rate reduction is required. In short, rate revenues should equal actual cost of service. The same principle should apply in the second and third steps. Each customer class should, to the extent practicable, produce revenues equal to the cost of serving that particular class, no more and no less. This may require a rate increase for some classes and a



1 rate decrease for other classes. The standard tool for performing this exercise is a  
2 CCOS study that shows the cost to serve each class. The goal is to modify rate  
3 levels so that each class provides revenues equal to its cost of service. Finally, in  
4 designing tariffs for individual classes, the goal also should be to align the rate design  
5 with the cost of service so that each customer class's rate tracks, to the extent  
6 practicable, the utility's cost of providing service to that customer class.

7 **Q WHEN YOU SAY "COST," TO WHAT TYPE OF COST ARE YOU REFERRING?**

8 A I am referring to the utility's "embedded" or actual accounting costs of rendering  
9 service; that is, those costs that are used by the Commission in establishing the  
10 utility's overall revenue requirement.

11 **Q WHAT IS THE BASIC PURPOSE OF A CCOS STUDY?**

12 A The basic purpose of a CCOS study is to determine the costs that a utility incurs to  
13 provide service to different classes of customers. After the utility's overall cost of  
14 service (or revenue requirement) is determined, a CCOS study is used to allocate the  
15 cost of service among the utility's customer classes.

16 A CCOS study shows the extent to which each customer class contributes to  
17 the total cost of the system. The CCOS study therefore is an important tool, because  
18 it shows the revenue requirement for each class.

19 Reliance on a properly prepared CCOS study in designing rates serves to  
20 minimize improper price signals and cross-subsidization issues between rate classes  
21 and customers within a rate class.

1    **Q     WHAT ARE THE MAIN ELEMENTS OF A CCOS STUDY?**

2    A     Cost of service is a basic and fundamental ingredient to proper ratemaking. In all  
3           CCOS studies, certain fundamental concepts should be recognized. Of primary  
4           importance among these concepts are the functionalization, classification, and  
5           allocation of costs.

6           Functionalization is the determination and arrangement of costs according to  
7           major functions, such as wastewater treatment and collection.

8           Classification involves identifying the nature of these costs according to  
9           whether the costs vary with the demand placed upon the system, the quantity of  
10          service consumed or usage, or the number of customers being served.

11          After the assignment of costs to each classification, each cost category must  
12          be allocated to classes. Fixed costs are those costs that tend to remain constant  
13          over the short run irrespective of changes in output, and are generally considered to  
14          be demand-related. Fixed costs include those costs that are a function of the size of  
15          the utility's investment in facilities, and those costs that are necessary to keep the  
16          facilities "on line." Variable costs, on the other hand, are basically those costs that  
17          tend to vary with throughput (or usage), and are generally considered to be  
18          commodity-related. Customer-related costs are those costs that are most closely  
19          related to the number of customers served, rather than the demands placed upon the  
20          system or the quantity consumed.

21    **Q     WHY IS IT IMPORTANT TO ADHERE TO BASIC COST OF SERVICE PRINCIPLES**  
22           **IN THE RATEMAKING PROCESS?**

23    A     The basic reasons for using cost of service as the primary factor in the ratemaking  
24           process are equity and stability.



1    **Q     PLEASE DISCUSS THE EQUITY CONSIDERATION.**

2    A     When rates are based on cost of service, each customer class pays what it costs the  
3           utility to serve that customer class, no more and no less. Charging no more and no  
4           less than cost of service is equitable. But when rates are not based on cost of  
5           service, then some classes are required to contribute disproportionately to the utility's  
6           revenues by subsidizing the service provided to other customer classes. This is  
7           inherently inequitable.

8    **Q     PLEASE DISCUSS THE STABILITY CONSIDERATION.**

9    A     When rates are closely tied to costs, the cost recovery impact on the utility associated  
10          with changes in numbers of customers and their usage patterns will be minimized as  
11          a result of rates being designed in the first instance to track changes in the level of  
12          costs. Thus, cost-based rates provide an important enhancement to a utility's  
13          revenue stability, thereby reducing the utility's need to file for future rate increases.

14                From the perspective of the customer, cost-based rates provide a more  
15          reliable means of determining future levels of costs. If rates are based on factors  
16          other than costs, it becomes much more difficult for customers to translate expected  
17          utility-wide cost changes (*i.e.*, expected increases in overall revenue requirements)  
18          into changes in the rates charged to particular customer classes (and to customers  
19          within the class). From the customer's perspective, this situation reduces the  
20          attractiveness of expansion, as well as continued operations, because of the  
21          lessened ability to plan. Cost-based rates provide accurate price signals that provide  
22          customers with important information necessary to make expansion decisions as well  
23          as decisions regarding continued operations, thus improving their ability to plan.

1 **Class Cost of Service and Revenue Allocation**

2 **Q HAVE YOU REVIEWED GWA'S PROPOSED WASTEWATER CCOS STUDY?**

3 A Yes. Based on my review, I do not oppose the use of GWA's proposed wastewater  
4 CCOS study methodology to guide class revenue allocation.

5 **Q HAS GWA BASED NAVY'S PROPOSED WASTEWATER CLASS REVENUE**  
6 **ALLOCATION ON NAVY'S COST OF SERVICE AS CALCULATED BY GWA?**

7 A No. GWA has not based Navy's proposed class revenue allocation on Navy's  
8 calculated wastewater class cost of service.

9 Navy's wastewater class cost of service as calculated by GWA is \$6,880,397,  
10 which results in a volumetric base rate of \$12.18 per Kgal for Navy. However, GWA's  
11 proposed Navy wastewater volumetric base rate of \$12.80 per Kgal would collect  
12 \$7,230,630 from Navy. GWA's proposed rate would collect more than Navy's cost of  
13 service.

14 Navy's current base wastewater volumetric rate is \$11.60 per Kgal. Thus,  
15 GWA's rate proposal of \$12.80 per Kgal results in a 10.3% increase to Navy, as  
16 compared to a cost-based increase of 5% for Navy.

17 **Q HOW MUCH OF A BASE WASTEWATER RATE SUBSIDY WOULD NAVY**  
18 **PROVIDE TO OTHER RATE CLASSES UNDER GWA'S CLASS REVENUE**  
19 **ALLOCATION PROPOSAL?**

20 A Under GWA's proposed class revenue allocation and volumetric rate for Navy, Navy  
21 would provide a base rate subsidy of approximately \$350,000 in the first year of  
22 GWA's multi-year rate plan (Fiscal Year 2022) to other rate classes at the wastewater  
23 rate of \$12.80 per Kgal proposed by GWA for Navy.



The annual subsidy provided by Navy would increase on a compounding basis in years 2 and 3 of the rate plan. The increasing subsidy provided by Navy during the multi-year rate plan is shown in Table 1 below.

Over the course of GWA's rate plan, Navy will provide a total subsidy to other rate classes equal to approximately \$1.15 million.

TABLE 1					
<u>GWA Multi-Year Wastewater Rate Plan</u>					
Line	Description	Year 1	Year 2	Year 3	Total
1	Proposed Increase for Navy		10%	7%	
2	Cost of Service (\$/Kgal) <sup>1</sup>	\$ 12.18	\$ 13.40	\$ 14.34	
3	Proposed Rate (\$/Kgal)	\$ 12.80	\$ 14.08	\$ 15.07	
4	Subsidy Provided by Navy (\$/Kgal)	\$ 0.62	\$ 0.68	\$ 0.73	
5	Navy Volume (Kgal)	564,893	564,893	564,893	
6	Total Subsidy Provided By Navy (\$)	\$350,234	\$385,257	\$412,225	\$1,147,716

<sup>1</sup> Cost of service estimated for Year 2 and Year 3

**Q ARE COST OF SERVICE BASED RATES IMPORTANT TO NAVY?**

A Yes. To the extent practical, rates for classes should be based on class cost of service. This is particularly important for Navy. Both Navy and Andersen Air Force Base are large consumers of wastewater services on the GWA system. It is vital that the appropriate allocation of costs to GWA's wastewater rate classes is based on proper cost-causation principles. Navy supports class rates based on cost of service as measured on proper cost-causation principles, as this will better ensure that the U.S. military installations on Guam accomplish their missions in the most cost-efficient way. Under cost-based rates, Navy would pay no more or no less than the cost it causes GWA to incur for providing it wastewater service. Navy would pay its class cost of service under a volumetric base rate of \$12.18 per Kgal.

1    **Q     HOW DO YOU RESPOND TO GWA'S PROPOSED WASTEWATER CLASS**  
2    **REVENUE ALLOCATION FOR NAVY?**

3    A     I recommend that Navy be brought to its CCOS using GWA's proposed cost of  
4    service methodology. Based on GWA's claimed revenue requirement, this would  
5    result in a wastewater base rate for Navy of \$12.18 per Kgal.

6    **Q     DOES NAVY RECOGNIZE THAT THERE ARE ADVERSE FINANCIAL IMPACTS**  
7    **ON SOCIETY IN GENERAL AS A RESULT OF THE COVID PANDEMIC?**

8    A     Yes. However, Navy is not aware of any jurisdiction that has placed the burden of  
9    mitigating utility rate increases during the pandemic on any one rate class or group of  
10   customers. GWA has proposed higher increases to the rates and charges of  
11   governmental users relative to other classes in order to mitigate the increases on  
12   customer classes it believes are most impacted by the pandemic, including the  
13   Residential class as well as the Hotels class and some Commercial classes.  
14   Providing mitigation to customer classes during the pandemic should not fall on the  
15   shoulders of a single group of customers. Rather, the financial effects of the  
16   pandemic should be shared system-wide.

17   **Q     HOW WOULD YOUR RECOMMENDATION CHANGE IF GWA'S FINAL REVENUE**  
18   **REQUIREMENT IS LOWER THAN WHAT IT HAS REQUESTED?**

19   A     If the Guam Public Utilities Commission approves a lower revenue requirement than  
20   requested by GWA, Navy's approved cost-based rate of \$12.18 per Kgal would be  
21   adjusted downward proportionally.



1 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A Yes, it does.

I, Brian C. Collins, aver the foregoing statements are true and accurate to the best of my knowledge,

August 6, 2021

A handwritten signature in cursive script that reads "Brian C. Collins". The signature is written in dark ink and is positioned above a horizontal line.

**Qualifications of Brian C. Collins**

1    **Q     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A     Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,  
3           Chesterfield, MO 63017.

4    **Q     WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?**

5    A     I am a consultant in the field of public utility regulation and a Principal with the firm of  
6           Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

7    **Q     PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND WORK  
8           EXPERIENCE.**

9    A     I graduated from Southern Illinois University Carbondale with a Bachelor of Science  
10          degree in Electrical Engineering. I also graduated from the University of Illinois at  
11          Springfield with a Master of Business Administration degree. Prior to joining BAI, I  
12          was employed by the Illinois Commerce Commission and City Water Light & Power  
13          ("CWLP") in Springfield, Illinois.

14                My responsibilities at the Illinois Commerce Commission included the review  
15          of the prudence of utilities' fuel costs in fuel adjustment reconciliation cases before  
16          the Commission as well as the review of utilities' requests for certificates of public  
17          convenience and necessity for new electric transmission lines. My responsibilities at  
18          CWLP included generation and transmission system planning. While at CWLP, I  
19          completed several thermal and voltage studies in support of CWLP's operating and  
20          planning decisions. I also performed duties for CWLP's Operations Department,  
21          including calculating CWLP's monthly cost of production. I also determined CWLP's



1 allocation of wholesale purchased power costs to retail and wholesale customers for  
2 use in the monthly fuel adjustment.

3 In June 2001, I joined BAI as a Consultant. Since that time, I have  
4 participated in the analysis of various utility rate and other matters in several states  
5 and before the Federal Energy Regulatory Commission ("FERC"). I have filed or  
6 presented testimony before the Arkansas Public Service Commission, the California  
7 Public Utilities Commission, the Delaware Public Service Commission, the Public  
8 Service Commission of the District of Columbia, the Florida Public Service  
9 Commission, the Georgia Public Service Commission, the Idaho Public Utilities  
10 Commission, the Illinois Commerce Commission, the Indiana Utility Regulatory  
11 Commission, the Kentucky Public Service Commission, the Public Utilities Board of  
12 Manitoba, the Minnesota Public Utilities Commission, the Mississippi Public Service  
13 Commission, the Missouri Public Service Commission, the Montana Public Service  
14 Commission, the North Dakota Public Service Commission, the Public Utilities  
15 Commission of Ohio, the Oregon Public Utility Commission, the Rhode Island Public  
16 Utilities Commission, the Public Service Commission of Utah, the Virginia State  
17 Corporation Commission, the Public Service Commission of Wisconsin, the  
18 Washington Utilities and Transportation Commission, and the Wyoming Public  
19 Service Commission. I have also assisted in the analysis of transmission line routes  
20 proposed in certificate of convenience and necessity proceedings before the Public  
21 Utility Commission of Texas.

22 In 2009, I completed the University of Wisconsin – Madison High Voltage  
23 Direct Current ("HVDC") Transmission Course for Planners that was sponsored by  
24 the Midwest Independent Transmission System Operator, Inc. ("MISO").

1           BAI was formed in April 1995. BAI and its predecessor firm has participated in  
2 more than 700 regulatory proceedings in forty states and Canada.

3           BAI provides consulting services in the economic, technical, accounting, and  
4 financial aspects of public utility rates and in the acquisition of utility and energy  
5 services through RFPs and negotiations, in both regulated and unregulated markets.  
6 Our clients include large industrial and institutional customers, some utilities and, on  
7 occasion, state regulatory agencies. We also prepare special studies and reports,  
8 forecasts, surveys and siting studies, and present seminars on utility-related issues.

9           In general, we are engaged in energy and regulatory consulting, economic  
10 analysis and contract negotiation. In addition to our main office in St. Louis, the firm  
11 also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

416786





**BEFORE THE PUBLIC UTILITIES COMMISSION OF GUAM**

**IN RE: PETITION FOR APPROVAL OF  
GWA'S THIRD FIVE-YEAR FINANCIAL  
PLAN (BASE RATE INCREASES)**

**GWA DOCKET 19-08**

**CERTIFICATE OF SERVICE**

I hereby certify, pursuant to Rule 4, that on 06 August 2021, I caused service of eight copies of the Department of the Navy's "Offer of Direct Testimony of Brian C. Collins", including Exhibit "A" attached thereto, and this "Certificate of Service" by hand delivery to the Public Utilities Commission of Guam:

Public Utilities Commission of Guam  
Suite 207, GCIC Building  
414 West Soledad Avenue  
Hagatna, GU 96910

Additional copies were served by hand delivery on 06 August 2021 to:

Miguel C. Bordallo  
General Manager  
Guam Waterworks Authority  
Gloria B. Nelson Public Service Building, Mangilao, Guam 96913

Tim Roberts  
ROBERTS FOWLER & VISOSKY LLP  
Attorneys for the Georgetown Consulting Group  
865 S. Marine Corps Drive, STE 201  
Tamuning, Guam 96913

\\

\\

\\

\\


\\

\\

Additional copies were served by email on 06 August 2021 to:

Dr. Kay Davoodi & Larry Allen  
NAVFACHQ  
[khojasteh.davoodi@navy.mil](mailto:khojasteh.davoodi@navy.mil)  
[larry.r.allen@navy.mil](mailto:larry.r.allen@navy.mil)

Dated this 6th day of August 2021.

 ODOCA.CHRIS  
TOPHER.R.154  
6837684

Digitally signed by  
ODOCA.CHRISTOPHER.R.  
1546837684  
Date: 2021.08.06  
08:01:30 +10'00'

Christopher R. Odoca  
Assistant Counsel, NAVFAC Marianas