



BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN RE: **REQUEST BY THE GUAM
 WATERWORKS AUTHORITY FOR
 APPROVAL OF BOND PROJECTS
 FUNDED BY GWA'S 2010 SERIES
 BOND PROCEEDS**

GWA Docket No. 11-01

ALJ REPORT

INTRODUCTION

This matter comes before the Guam Public Utilities Commission (the "PUC") upon the request of Petitioner Guam Waterworks Authority ("GWA") for approval of its proposed projects funded by GWA's 2010 Series Bond proceeds, filed with the PUC on January 12, 2011 and pursuant to the PUC's October 29, 2010 Order.

BACKGROUND

1. On November 23, 2010, GWA closed on the 2010 Series Bond that provides a net total of about \$87.4 million for capital improvement projects.
2. The PUC is tasked with reviewing and approving all uses of bond proceeds pursuant to 12 G.C.A. Section 12004.
3. GWA set forth its projects to be funded under the 2010 Series Bond by way of its November 23, 2010 Engineering Capital Improvement Plan (the "CIP"), which is attached as "Exhibit A" to GWA's January 12, 2011 petition. The CIP is GWA's five-year blueprint that describes certain capital improvement projects aimed at expanding and improving GWA's infrastructure. The CIP provides, among other things, descriptions of each project, how the projects are financed, and why such projects are necessary.

ORIGINAL

4. On November 24, 2010, the Consolidated Commission on Utilities (the "CCU") issued Resolution No. 03-FY2011 that approved the projects identified in GWA's CIP, which also included projects funded by the 2010 Series Bond.

ANALYSIS

5. The 2010 Series Bond projects include Stipulated Order projects, GWA Master Plan projects, and other projects identified by the United States Environmental Protection Agency (U.S. E.P.A.).

6. The PUC must determine whether the Series Bond projects identified in GWA's CIP are reasonable.

A. The Capital Improvement Plan

7. By way of the CIP, GWA set forth its capital improvement projects that aspire to expand and improve GWA's infrastructure within the next five (5) years. The CIP provides, among other things, descriptions of each project, how the projects are financed, and why such projects are necessary.

B. The Series Bond Projects

8. The CIP lists a number of projects that will require Series Bond funding. The projects are divided into four (4) groups, namely: (1) potable water projects; (2) wastewater projects; (3) electrical engineering projects; and (4) other projects, which are categorized as miscellaneous projects.

i. Potable Water Projects

9. GWA's potable water projects include the design and construction of 24,800 feet of water transmission lines between the Choat and Agana Heights water storage tank, as well as the connection of seven (7) existing A-series wells to the

transmission line, and the installation of chlorination equipment at each of the two storage tanks. GWA also intends on the designing and constructing an additional water booster pump station.

10. Another potable water project is the meter replacement program, which will allow GWA to continue replacing all GWA residential and commercial meters with AMR (automatic meter reading) meters, and which will provide electronic collection of monthly metering data. GWA maintains that the meter replacement program is necessary to ensure that each GWA customer's connection to the water systems has a functioning, accurate, and accessible water meter that can be read monthly, and therefore properly billed.

11. Under the potable water system planning project, GWA will engage in long-term system and environmental planning in order to develop and prioritize its capital improvement programs. Under the Brigade II (Ugum Lift) BPS upgrade project, GWA will design and construct a new pump station at the Brigade II BPS site, which will serve the Windward Hills Reservoir and the Pulantat Reservoir.

12. In addition to the projects listed above, GWA's deep well rehabilitation project intends to rehabilitate up to three (3) water wells; GWA also intends on constructing new deep wells at the "down hard" well sites to increase water supply; and, rehabilitating the Asan Spring Grounds Reservoir.

13. Another potable water project is the master metering project, which will involve the purchase, design, and installation of water meters at major GWA facilities and pressure zones to better account for water consumption. GWA maintains that this metering project will greatly aid in leak detection studies and reports. GWA further

maintains that the metering project is necessary to perform water audits, which are required by the U.S. E.P.A.

14. GWA further plans on designing and constructing modifications to the Ugum Water Treatment Plant's intake to minimize siltation and to provide more raw water supply during periods of low water flow. In addition, GWA intends to construct around sixteen (16) new production wells in order to produce an additional seven (7) million gallons per day of water to meet today's increased demand for water.

15. Other potable water projects include: system-wide water distribution pipe replacement to replace pipes that are leaking, failing, and aged; pressure zone realignment and development through the installation of pressure regulating and pressure sustaining valve stations; improvements to the Northern, Central, and Southern water distribution systems in order to improve fire flow and pressure; mechanical and electrical equipment replacement by stocking, storing, and keeping reserve inventory for such equipment; the development of a corrosion assessment program for all steel water reservoirs to assess any internal and external corrosion; the rehabilitation of any such corroded reservoirs; and, the construction of additional reservoirs to address deficiencies in Guam's water storage capacity.

16. Finally, GWA intends on making water distribution system upgrades to repair damaged, inadequate, and failing pipes and pipelines; and, constructing a two (2) million gallon "finished water" reservoir at the Ugum Water Treatment Plant, which would relieve the current reservoir and allow for repairs.

ii. Wastewater Projects

17. GWA's wastewater projects include wastewater system planning. Under this project, GWA intends to engage in long-term system and environmental planning in order to develop and prioritize its capital improvement programs.

18. Another wastewater project involves the replacement of GWA vehicles with four (4) new pickups outfitted with tool boxes, three (3) maintenance vans, and "1 Ton" pickups. GWA requests the replacement of these vehicles as a number of them are very old and in poor condition, and therefore unsafe, and require significant repair. GWA has needed to lease three (3) vehicles in order to maintain coverage.

19. The wastewater projects also include removal of eleven (11) one-ton chlorine cylinders, which, according to GWA, pose a serious public health and safety threat to the community. GWA also intends on upgrading the sewer system in Tumon in an effort to address inadequate sewer capacity and to prevent sewer overflow in Tumon. In addition, GWA intends on planning and designing new wastewater treatment facilities in Baza Gardens, Agat-Santa Rita, and to upgrade the sewage lines in Baza Gardens to respond to the increase in sewage connections in the Baza Gardens service area.

20. Finally, the wastewater projects also include replacement of sewage treatment plants in Baza Gardens and Agat-Santa Rita. GWA maintains that the existing facilities are unreliable, difficult to operate, and require significant repair.

iii. Electrical Engineering Projects

21. With respect to the electrical engineering projects, GWA intends on designing, developing, and installing electrical motor controls at critical well sites to limit pump failure at the wells. GWA also proposes the design and development of a "SCADA"

(Supervisory Control and Data Acquisition) system. The SCADA system will be installed at a "master station" and at critical water wells, chlorination system wells, and wastewater pumping stations. The SCADA system will transmit SCADA data to a GWA dispatch center where the information will be disseminated to other GWA personnel. The SCADA system would allow around the clock monitoring of GWA facilities and provide timely information in the event of emergencies.

22. Four electrical upgrade projects were also identified in the CIP. GWA has identified electrical upgrade projects for the water booster pump stations located in Pago Bay, Windward Hills, Gayinero, Santa Rosa, Santa Rita Springs, and other stations. These projects involve replacing motors, and other parts, that show signs of corrosion and aging.

iv. **Miscellaneous Projects**

23. The CIP also identified the following miscellaneous projects that require Series Bond funding. The laboratory modernization project involves the renovation and expansion of GWA's Dededo Laboratory. The plan is to expand the existing laboratory from 2,300 square feet to 8,400 square feet. In addition, GWA intends on surveying its property as well as property that is in the process of being conveyed to GWA. GWA maintains that the Government of Guam conveyed land for water storage tanks, water and wastewater treatment plants, under the condition that GWA complete the survey of such properties. Also among GWA's miscellaneous projects, GWA intends to utilize bond funds for general plant improvements replacing, and repairing, failing water distribution system pipes. GWA maintains that it must begin replacing failing pipelines that are damaged, inadequate, and failing.

24. The CIP projects identified and discussed above, namely the potable water projects, the wastewater projects, the electrical engineering projects, and the miscellaneous projects, are the result of several hours of consultation and development by GWA's management and engineers, as well as by GWA's independent engineering consultants.

25. In particular, all of the CIP projects were approved by R.W. Beck, Inc., GWA's independent engineering consultant. In addition, a number of the projects, namely those marked in the CIP as Stipulated Order projects, have been previously approved by the PUC. The projects marked as GWA Master Plan projects were developed by Brown and Caldwell, another independent engineering firm. Thus, the 2010 Series Bond Projects, along with the other projects identified in the CIP, have undergone serious scrutiny and development, and are the result and product of several engineers and professionals in the water and wastewater field.

26. Moreover, the CCU, by way of Resolution No. 03-FY2011, approved the CIP projects identified and discussed above.

27. Accordingly, based on the documentation provided by the CIP, the work of several engineers, professionals, and institutions reflected in the record, and the approval of the CCU, the ALJ hereby finds that the Series Bond projects, along with the corresponding budgets for such projects, are reasonable and necessary for the expansion and improvement of Guam's water and wastewater system.

28. Thus, all of the projects for which GWA seeks approval in its January 12, 2011 petition are designed to improve Guam's water and wastewater utility infrastructure, and to increase their reliability and efficiency.

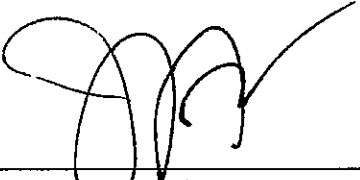
RECOMMENDATION

29. GWA has furnished satisfactory documentation itemizing all of its CIP projects from now until 2015. Therefore, GWA has adequately demonstrated its need to improve its present infrastructure in order to provide current GWA customers with adequate water and wastewater services, as well as to expand such infrastructure in anticipation of the increase in water and wastewater service demands attendant to the military buildup.

30. For the reasons set forth herein, the ALJ hereby recommends that the PUC approve all of the Series Bond projects identified in GWA's January 12, 2011 petition, and for the amounts requested therein. An Order is submitted herewith for the consideration of the Commission.

Dated this 24th day of January, 2011.

for



DAVID A. MAIR
Administrative Law Judge