

GUAM PUBLIC UTILITIES COMMISSION
SPECIAL MEETING
January 31, 2011
SUITE A12 (ARCADE), GCIC BUILDING, HAGATNA

MINUTES



The Guam Public Utilities Commission [PUC] conducted a special meeting commencing at 6:00 p.m. on January 31, 2011, pursuant to due and lawful notice. Commissioners Johnson, McDonald, Cantoria, Perez, and Pangelinan were in attendance. The following matters were considered at the meeting under the agenda made *Attachment "A"* hereto.

1. Approval of Minutes

The PUC reviewed the minutes of the meeting conducted on December 15, 2010. Upon motion duly made, seconded and unanimously carried, the minutes were approved.

2. Guam Telecom LLC

The Chairman announced that the next matter on the Agenda was GT Docket 10-03, Tariff Transmittal No. 2, Legal Counsel Report and Proposed Order. The matter involves a new tariff for Guam Telecom that would establish business services. Counsel indicated that public notice on this matter was published. The Commission has made it a practice with new tariffs to give public notice such that any person or company that wishes to comment has an opportunity to do so. The Chairman then asked if anyone wished to comment on the tariff. There was no response from any member of the public. Counsel indicated that the matter was then properly before the Commissioners and ready for decision.

The tariff would establish a business line service with non-recurring fee per primary line of \$60 and a monthly recurring fee of \$27.99. Other services provided to business customers would be key-line service, basic trunk service, and DID/DOD trunk service, the primary rate interface, advanced features, direct inward dial services and others. These are all standard business services. The cost indicated by Guam Telecom seems to be customary and in accordance with similar rates charged by other carriers. Counsel recommends approval. The addition of such additional services by Guam Telecom will promote the goals of the Guam Telecommunications Act in making modern innovative services available to the public. Commissioner Pangelinan recused himself, as Guam Telecom is one of his firm's clients. Upon motion duly made, seconded and unanimously carried, the Commissioners approved Guam Telecom's Tariff Transmittal No. 2 for the establishment of new business services. The Order adopted is made *Attachment "B"* hereto.

3. GTA Telecom LLC

The Chairman indicated that the next order of business was GTA Docket 10-09, Joint Application of TeleGuam Holdings LLC and GTA Telecom LLC for Approval of the Transfer of Control of TeleGuam Holdings LLC and GTA Telecom LLC to AP TeleGuam Holdings LLC. Counsel indicated that this matter was not ready for decision. A public hearing had been conducted on January 27, 2011. Public Comments were received by GTA, PDS, IT&E, and the AP Funds, the purchaser. Those comments had to be reviewed such that an ALJ Report in this matter was not yet prepared. Three additional filings had been received arising out of the hearing, including comments from GTA, IT&E, and Senator Cruz's office. These comments were being reviewed. Counsel had also sent additional requests for information to the AP Funds. Counsel requested that the Commission extend the 90 day statutory deadline for a decision for an additional 30 days in accordance with 12 GCA §12103. Receipt by PUC of additional comments and filings establish good cause for extension of the decision deadline. Upon motion duly made, seconded and unanimously carried, the Commissioners approved an extension for an additional 30 days within which the PUC could decide this matter.

The Chairman announced that the next matter on the Agenda was GTA Docket 09-04, Stipulation regarding Interim Rates to be charged by GPA for pole attachments, an ALJ Report, and Proposed Order. Counsel reported that GTA's complaint, filed in October of 2009, alleged that the pole attachment rates charged by GTA were discriminatory. Telecommunications companies on Guam use space on GPA's power poles and there are rental agreements entered into between GPA and each company. Pole attachments constitute the wires, cables, antennas and other equipment owned by a private company that are attached to a pole owned by GPA. GTA's basic complaint was that the rates established for the telecommunications companies were disparate and discriminatory. A review of the agreements indicates that the rates charged by GPA to different companies for pole attachments vary widely.

In the agreements, rates vary for pole attachments from \$3.42 per attachment per year to \$11.00 per attachment per month. Previously the ALJ determined that the PUC did have jurisdiction in this matter. Attachment rates were determined to be charges from GPA, which are regulated by the PUC pursuant to 12 GCA §12015. The ALJ had ordered the parties to meet and try to reach an agreement regarding pole attachment charges; otherwise a full rate case would be a very expensive undertaking in which experts would have to be hired. The parties have proposed a stipulation whereby they agree to a rate of \$6.00 per pole attachment per year. This is an interim rate. Under the Stipulation entered into between GTA, GPA, and MCV, proceedings would be conducted in this matter when the Federal Communications Commission has revised its pole attachment rates or one year from the date of this Stipulation, whichever is sooner.

The ALJ concluded that the interim rate \$6.00 per pole per year, was “just” and “reasonable”, as it is within the average national rates. Since the PUC had not previously set pole attachment rates, the ALJ recommends in his Report that the Stipulation of the parties be approved by the PUC and that interim rates be established. Commissioner McDonald asked why a charge per foot measurement was not included. Counsel indicated that such a charge could be considered for the permanent rates; but for the time being it was difficult to have the parties agree to a rate. The Chairman asked whether rates charged to ILECs and cable companies were typically the same or different. Counsel indicated that the charges appear to be higher for an ILEC, but such reasoning may or may not be applicable in Guam.

Commissioner Perez asked whether the rate only affects GTA and Guam Cable Vision. Counsel indicated that the interim rate would also affect IT&E, Docomo, perhaps IConnect and a few others. Commissioner Perez further asked whether the other companies had input in this matter. Counsel stated that they were given an opportunity for input, but were not involved in the proceedings. However, the new interim rate will increase the overall amounts that GPA secures from its pole attachment rentals. Counsel of GPA confirmed such increase in revenues. Upon motion duly made, seconded and unanimously carried, the Commission approved the Stipulation of the parties, and established a interim \$6.00 per pole attachment per year charge, and adopted the Order made *Attachment “C”* hereto.

4. Guam Power Authority

The Chairman announced that the next matter on the Agenda was GPA Docket 02-04, GPA’s December 15, 2010 LEAC Filing, GCG Report and Proposed Order. Counsel indicated that this meeting was also the public hearing scheduled for the LEAC matter. The Chairman then asked if there was anyone that wished to testify concerning LEAC. Senator Ben Pangelinan, Senior Senator of the 31st Guam Legislature, and Chairman of the Committee on Appropriations, Taxation, Public Debt, Banking, Insurance, Retirement and Land, came forward and proceeded to testify concerning the expenditure of bond funds by the Guam Waterworks Authority, as well as the proposed LEAC increase. A copy Senator Pangelinan’s testimony was filed with the Commission and is made *Attachment “D”* hereto.

Counsel proceeded to report on LEAC filings. In its original filing in December, 2010, GPA requested that the current LEAC factor, \$.12465 per kWh for its civilian customers, be increased to \$.15901 per kWh for meters read on and after February 1, 2011. Georgetown Consulting Group filed its Report in January 2011, and concluded that PUC should rely on the most recent fuel price figures available to determine the LEAC Factor. Using updated Morgan Stanley prices for fuel charges per barrel, GCG recommended that a higher fuel factor, \$.16153 per kWh, be utilized. The increase in the LEAC factor for this upcoming period is strictly based on the fuel prices; GPA is

attempting to recover its actual fuel costs by increasing the LEAC Factor. Georgetown's Report considered some other matters related to LEAC, such as fuel handling costs, line of credit charges and storage costs, and whether such matters should continue to be appropriately be considered in the LEAC Factor. Counsel summarized other matters from the GCG Report and issues concerning the current line loss factor of GPA. Counsel recommended that the line loss factor remain at 7% for now, but that the issue should be further examined. Another issue was whether there should be differentiated LEAC factors for customers at the distribution level, transmission level, and sub-transmission levels.

GCG was recommending a LEAC Factor at \$.16153 per kWh, which constitutes an 18.53% increase in the total residential bill for the average customer. The Chairman asked whether the Commission should evaluate the LEAC Factor every three months, particularly in light of the fluctuations. GPA indicated that they were considering such a proposal, but that some other proposals were now also being considered. The Chairman indicated that from a consumer's standpoint, it was difficult to accept a double-digit increase. The Chairman then asked about fuel hedging; the CEO of GPA indicated that GPA expected to have a new revised fuel hedging program for the PUC in the middle of February. Commissioner Cantoria asked whether there was anything else that GPA could do to mitigate the possibility of future LEAC increases to ratepayers. The CFO of GPA, Mr. Wiegand, indicated that GPA was attempting to save money and was exploring other power possibilities, such as nuclear and geothermal. Those alternative energy sources are costly at present, but have the potential to save billions of dollars to ratepayers over the next 20 to 30 years.

Commissioner Pangelinan asked whether GPA, in preparing a LEAC Factor, worked through a step of trying to determine whether other monies could be re-obligated to reduce the LEAC amount. The CEO Mr. Wiegand indicated that the base rate side and the fuel side were kept separate in the GPA books; LEAC is just a formula with which to determine the fuel prices. The process of seeking to save funds occurs more on the base rate side of GPA. Commissioner Perez asked whether GPA also considered that cost saving exercise for fuel. The GPA CEO indicated that GPA had been successful in increasing the efficiency of the baseload plants and not operating the diesels and has saved about \$200M over the last 8 years. GPA also saved \$12M over a three year period by virtue of its recent fuel oil contract, in which a better price was obtained. Mr. Bill Blair, Counsel for GCG, agreed that there was not much room for fuel cost savings. Commissioner Cantoria asked so what agency would be responsible to assist consumers with buying power saving equipment such as refrigerators and air conditioning. The CFO of GPA indicated that GPA has asked Guam Energy Office to provide it with a grant so that it could assist people with money to put in more energy efficient water heaters and similar equipment.

Commissioner Perez asked about line losses at the present rate of GPA at 6.7%. GPA officials indicated that they hope to bring it down further. Commissioner Perez also asked whether GPA could use the \$5.1M in excess bond funds to relieve some of the increase in the LEAC Factor. The General Manager of GPA Mr. Flores indicated that \$5.1M settlement funds received by GPA should be used to offset the working capital fund surcharge. Senator Pangelinan suggested that it might be more efficient to apply the \$5.1M settlement funds to offset the LEAC increase, rather than applying the funds to the working capital surcharge. Mr. Simon from Ken Corporation indicated that Ken Corp, as a major energy consumer in the hospitality business, faced a business challenge with this increase in the LEAC Factor. The 18% increase will cost Ken Corp approximately \$7,000 per day. High fuel cost affects the quality of the hotels because the business can't make up the money. He suggested the possibilities of high and low demand rates for large consumers for energy pricing, with lower off peak rates.

The General Manager of GPA indicated that there were no such variable demand rates at the present time. Commissioner McDonald asked GPA whether it could agree to accept a lower under recovery of its fuel charges, between \$6 and \$7 Million. GPA officials did not wish to accept less than the actual amount needed to recover full cost. Commissioner McDonald suggested that perhaps a lower under recovery could be given to GPA based upon creating a lower line loss factor and adding in the amount received by GPA from pole attachments. Counsel indicated that the Commission had accepted a 7% line loss for GPA. Mr. Blair indicated that if GPA was meeting a 6.7% standard, it is meeting the established line loss factor. There should not be a disallowance of fuel costs where GPA is meeting the established current benchmark. The Chairman indicated that GPA had showed good improvement in line losses over the past few years. The General Manager of GPA indicated that GPA would be in a better position to reduce line losses than when the Smart Grid Project is put into effect.

Upon motion duly made, seconded and unanimously carried, the Commissioners approved the increase in the LEAC Factor recommended by GCG; however, such approval was subject to a proviso that \$5.1M that GPA has received as settlement funds will come before the PUC for approval, and PUC reserves the right to suggest or order the allocation of those funds to LEAC or otherwise. No later than the April PUC meeting, PUC will also consider the possible reallocation of the \$3.1M approved by the PUC in its August 31, 2010 Order for use by GPA in payment of bond project and Smart Grid initiative cost overruns as an offset to the LEAC increase. The Order adopted by the PUC is made *Attachment "E"* hereto.

5. Port Authority of Guam

The Chairman indicated that the next matter for consideration by the PUC was PAG Docket 10-03, GDP Marina Renovation, Phase I Construction, ALJ Report, and Proposed Order. Counsel indicated that the Report on this matter was prepared by ALJ Mair.

The Port sought to procure certain improvements for the Gregorio D. Perez Marina, the boat basin. The winning bid by Black Construction was \$1.2M, which amount was 29% less than the government's estimate of what the project would cost. For PUC purposes, the most significant point is that federal money, not port operating revenues, is paying for this renovation project. The ALJ found that there would be no impact on the operating budget of the Port resulting from this project. The project involves structural renovations for the marina facilities including replacement of the sheet pilings which are disintegrating. In the first phase of this project, Black Construction will replace 461 linear feet of pilings and will put in new pipe railing, ladders, bulkhead, concrete walk way and other improvements. According to the ALJ the standard contract terms and conditions are included in the contract between the Port and Black Construction. The ALJ recommends that the Commission approve the project as the Port has demonstrated the need to improve its present infrastructure by renovating its marina. In response to Commissioner Perez's questions, the CFO Mr. Guevara indicated that Phase 1 was the most critical and that federal funds were still being sought for the other phases. Upon motion duly made, seconded and unanimously carried, the Commissioners approved the GDP Marina renovation project awarded to Black Construction and the proposed contract. The Order made in *Attachment "F"* hereto was adopted.

Upon motion duly made, seconded, and unanimously carried, the Commissioners approved the contract between the Port and Black Construction for the GDP Marina Renovation, Phase I - Construction. The Order approved is made *Attachment "F"* hereto.

The Chairman announced that the next matter for consideration by the PUC was Port Docket 09-01, General Regulatory; review of Proposed Contract Review Protocol and PUC Order. Counsel indicated that the contract review protocol was still in the formative stage with the Port, PUC Consultants, and ALJ Mair's Office. Counsel indicated that there was only a draft contract review protocol, and there may be further revisions. There is no need for Commission action at the present time.

6. Guam Waterworks Authority

The Chairman indicated that the next matter on the Agenda was GWA Docket 11-01, Petition for Reprogramming of Bond Funds, ALJ Report, and proposed Order. Counsel indicated that this Report was prepared by ALJ Mair. In November of 2010 the PUC had approved the 2010 Bond Issue that provided approximately \$87.4M for capital improvement projects. GWA is now requesting approval of the specific uses of funds, and the projects that they wish to undertake. GWA has submitted a master plan, a capital improvement plan which lists all of the uses of bond funds that it intends to undertake including projects involving federal grant funds and some Department of Defense funds. These projects involve potable water collection and distribution, construction of water transmission lines, building of new wells, installation of

chlorination equipment, and the meter replacement project, among others. Three of the projects are "Stipulated Order" projects previously approved by the Commission.

Wastewater projects include replacement of vehicles, replacement of chlorine tanks, upgrading the sewer system in Tumon, designing new water treatment facilities in Baza Gardens and Santa Rita, etc. GWA also intends to proceed with the SCADA. Booster pump stations will be upgraded and the GWA Dededo laboratory expanded. Amounts for each project are indicated in the GWA project listing. Commissioner Perez asked about the status of the meter replacement program. GWA Legal Counsel indicated that GWA was still in the process of installing meters; about 8,000 out of 15,000 have been replaced. The Chairman indicated that there was a gap in budgeting from this fiscal year (\$3.5M) and 2015 (\$6M). Mr. Taylor stated that GWA would attempt to source funds for the project from other sources. He then further noted that GWA intended to use \$7.3M from the System Development Charge for construction of water wells. GWA Legal Counsel indicated that only \$1.5M had been generated from SDC so far, but hopefully the military buildup would cause "a spike."

GWA Legal Counsel indicated that the funds would be obtained from the Okkodo project, and an additional \$12M in addition to SDCs for offsite water improvements. Commissioner McDonald asked about the stated lifespan on the meters. GWA Legal Counsel replied that there's a five year warranty and on the new meters it would be seven years. Commissioner Cantoria asked about the requirement in bond funding law that GWA repay \$20M to the government. Mr. Taylor indicated that there is no requirement in the law that GWA borrow the \$20M. They have until 2015 to do so. Commissioner McDonald asked whether it would be more feasible to let the Gov. Guam debt to ride out its term. Mr. Taylor indicated that this government of Guam debt has not been transferred to GWA. The funds hadn't necessarily gone to GWA for GWA projects. Mr. Taylor stated that Senator Pangelinan was attempting to take the general obligation requirement from the government of Guam and make GWA ratepayers pay for it. There was no mandate that the CCU approved the borrowing for the full \$240M. If GWA borrows the \$240M, then GWA would have to pay off the remaining balance on the old bond.

Counsel then stated that the ALJ had recommended that the PUC approve all of the series bond projects identified in GWA's petition. The Commissioners would not be approving all of the capital projects listed in the five year plan, but specifically those funded by the 2010 Revenue Bonds. Upon duly made, seconded, and unanimously carried, the Commissioners approved authorization for GWA to utilize the proceeds of the 2010 series bonds for all the capital projects specifically funded by such bonds. Legal Counsel was also directed to provide an opinion as to whether Public Law 30-145 and its mandate should be considered by the PUC prior to approving any future use of the bond funds by GWA, and what impacts said law has upon GWA's future use on bond funds. The Order and Supplemental Order approved by the PUC are made *Attachments "G" and "H" hereto.*

7. PUC Website

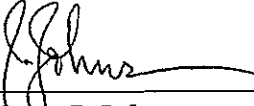
PUC Administrator indicated that PUC Consultant was working on a proposal to work out of his home on the PUC website.

8. Administrative Matters

The Chairman announced that the Commission would proceed to consider a Resolution establishing the holding of Commission Meetings. He requested that the proposed date for future regular meetings be the third Monday of each month rather than the last Monday of each month. Counsel indicated that the establishment of regular meetings would assist the Commission in compliance with the Open Government Law. Commissioner Perez requested that a provision be placed in the Resolution indicating that if the Monday for a regularly scheduled meeting was a holiday, the regular meeting would be held on the following Wednesday. Upon motion duly made, seconded, and unanimously carried, the Commissioners approved the Resolution made *Attachment "I"* hereto.

The Commissioners proceeded to discuss the division of hearing matters as ALJ between ALJ Mair and Legal Counsel Horecky's Office. ALJ Mair will handle all ALJ matters for the Guam Waterworks Authority and the Port Authority. Attorney Horecky would handle ALJ matters for Telecommunications, Guam Power Authority, and Solid Waste Division.

There being no further business, the Commissioners moved to adjourn the meeting.



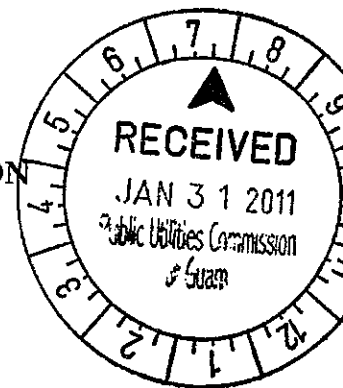
Jeffrey C. Johnson
Chairman

**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION
SPECIAL MEETING
SUITE 202 GCIC BUILDING
414 W. SOLEDAD AVE. HAGATNA, GUAM
6:00 p.m. January 31, 2011**

Agenda

- 1. Approval of Minutes of December 15, 2010.**
- 2. Guam Power Authority**
 - **GPA Docket 02-04, GPA's December 15, 2010 LEAC Filing; Consideration of GCG Report and Proposed Order**
- 3. Guam Telecom LLC**
 - **GT Docket 10-03, Tariff Transmittal No. 2 (Business Services), PUC Counsel Report, and Proposed Order**
- 4. GTA Telecom LLC**
 - **GTA Docket 10-09, Joint Application of Teleguam Holdings LLC and GTA Telecom LLC for Approval of the Transfer of Control of Teleguam Holdings LLC and GTA Telecom LLC to AP Teleguam Holdings LLC, ALJ Report, and Proposed Order**
 - **GTA Docket 09-04, GTA Teleguam LLC and Guam Power Authority Pole Attachments; Stipulation Regarding Interim Pole Attachment Rates Charged by Guam Power Authority; ALJ Report, and Proposed Order**
- 5. Port Authority of Guam**
 - **Port Docket 10-03, GDP Marina Renovation, Phase I - Construction, ALJ Report, Proposed Order**
 - **Port Docket 09-01, General Regulatory; review of proposed Contract Review Protocol and PUC Order**
- 6. Guam Waterworks Authority**
 - **GWA Docket 11-01, Petition for Reprogramming of Bond Funds, ALJ Report, Proposed Order**
- 7. PUC Website**
 - **Update**
- 8. Administrative Matters**
 - **Resolution establishing the holding of Commission Meetings**
- 9. Other Business**

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION



In the Matter of:)

GT Docket 10-03

Guam Telecom LLC Tariff Transmittal No.)
2, Business Services)

ORDER

Background

This matter comes before the Guam Public Utilities Commission upon Guam Telecom LLC's filing of Tariff Transmittal No. 2, which is an amendment to Guam Telecom General Exchange Tariff No. 1.¹ The purpose of such tariff is to provide for the introduction of business services to customers.² 12 GCA §12106(a) requires telecommunications companies such as GT to file tariffs with the PUC indicating the rates and charges and the classifications, terms and conditions of their telecommunications services.³

This new tariff amends the General Exchange Tariff to provide for the establishment of Business Line Service. For such business line service, there is a non-recurring fee per primary line of \$60.00 and a monthly recurring fee of \$27.99.⁴ Other amendments to the General Exchange Tariff include services available to business customers, such as key line service, basic trunk service, DID/DOD Trunk Service, Primary Rate Interface, Advanced Features, Direct Inward Dial Services, and others.⁵

PUC Counsel has filed his due diligence report, which reviews GT's Tariff Transmittal No. 2, Business Services.⁶ Counsel recommends approval of GT's Tariff Transmittal No. 2, as the filing is in accordance with 12 GCA §12106.⁷ Counsel recommends that the tariff, in the form filed by GT on November 29, 2010, be approved. The business services provided appear to be standard and

¹ Guam Telecom LLC Filing of Tariff Transmittal No. 2, GT Docket 10-03, filed November 29, 2010.

² Id. at p. 1.

³ 12 GCA §12106 (a).

⁴ GT Filing of Tariff Transmittal No. 2, GT Docket 10-03, filed November 29, 2010, at p. 48.

⁵ Id. at pgs. 48-74.

⁶ PUC Counsel Report, GT Docket 10-03, dated January 10, 2011.

⁷ Id. at p. 2.

similar to those provided in IT&E General Exchange Tariff No. 1.⁸ Approval of GT's tariff for the provision of business services will "promote the goal of the Guam Telecommunications Act of 2004 to promote the development of modern, innovative, accessible and affordable telecommunications services and products for the people of Guam."⁹

On January 13, 2011, PUC published notice of GT's request for the approval of its tariff for the introduction of business services, and invited public comments regarding the proposed tariff. A deadline of January 25, 2011 was set for interested parties to file public comments regarding the tariff. No comments were received by PUC in response to this notice, or upon the hearing of this matter.

Ordering Provisions

Upon consideration of the record herein, review of Tariff Transmittal No. 2, Business Services, the PUC Counsel Report, and for good cause shown, on motion duly made seconded and carried by the affirmative vote of the undersigned commissioners, the Commission hereby Orders that:

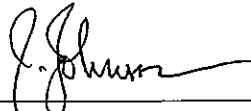
1. Guam Telecom LLC's Tariff Transmittal No. 2 which amends General Exchange Tariff No. 1, was properly filed pursuant to 12 GCA 12106(a) which requires that telecommunications companies such as GT file tariffs indicating the rates and charges and classifications, terms, and conditions of their telecommunications services.
2. Tariff Transmittal No. 2, Business Services, is hereby approved and adopted; the PUC finds that the introduction of such business services will expand the availability of telecommunications services to the people of Guam in accordance with the goals of the Guam Telecommunications Act of 2004. The rates, charges and pricing for such business services appear to be similar to those charged by other telecommunications companies.
3. Tariff Transmittal No. 2, Business Services, is effective as of November 29, 2010.

⁸ PUC Order, Docket 07-8 (IT&E Oversees Inc. Petition for Approval of General Exchange Tariff, filed August 13, 2007).

⁹ 12 GCA §12101(a)&(3).

4. Guam Telecom LLC is ordered to post this Order and its Tariff Transmittal No. 2 on its website.
5. Guam Telecom LLC must file an updated and amended version of General Exchange Tariff No. 1, which includes all revisions and amendments for the introduction and establishment of business services as set forth in Tariff Transmittal No. 2.
6. GT is ordered to pay for the PUC's regulatory fees and expenses incurred in this Docket, including, without limitation, consulting and counsel fees and expenses. Assessments of PUC's regulatory fees and expenses is authorized pursuant to 12 GCA §12002(b) and 12024(b), 12104, 12103, the Rules Governing Regulatory fees for Telecommunications Companies, and Rule 40 of the Rules of Practice and Procedure before the PUC.

Dated this 31st day of January, 2011.



Jeffrey C. Johnson
Chairman



Rowena E. Perez
Commissioner

Michael A. Pangelinan
Commissioner



Joseph M. McDonald
Commissioner



Filomena M. Cantoria
Commissioner



BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

**IN RE: GTA TELEGUAM LLC AND
GUAM POWER AUTHORITY/
POLE ATTACHMENTS**

GTA Docket 09-04

ORDER

INTRODUCTION

This matter comes before the Guam Public Utilities Commission ["PUC"] upon the STIPULATION of Guam Cable Vision LLC ["MCV"], GTA Teleguam LLC ["GTA"], and Guam Power Authority ["GPA"], a true and correct copy of which is attached hereto as Exhibit "A". The parties request that the PUC approve an interim pole attachment rate of Six Dollars (\$6.00) per pole per year, effective January 1, 2011.

BACKGROUND

1. On January 26, 2011, the Administrative Law Judge ["ALJ"] issued his ALJ Report regarding pole attachment rates charged by the Guam Power Authority ["GPA"].
2. In said report, the ALJ explained the procedural background of this proceeding. The Formal Complaint filed by GTA Teleguam LLC ["GTA"] alleged that GPA was charging discriminatory rates for pole attachments, and that uniform rates should be established by the PUC for GPA pole attachment charges.
3. On January 7, 2010 the parties hereto filed a "STIPULATION REGARDING INTERIM POLE ATTACHMENT RATES CHARGED BY THE GUAM POWER AUTHORITY." The ALJ recommends that the PUC adopt the Stipulation and approve an interim pole attachment rate of Six Dollars (\$6.00) per pole per year effective January 1, 2011.

DETERMINATIONS

4. Pursuant to 12 GCA §12004, the PUC is authorized to investigate, examine, establish and modify rates and charges for utility services. 12 GCA §12004. There is presently a disparity in pole attachment rates and charges paid by

ATTACHMENT C

different cable and telecommunications companies on Guam; it is appropriate for the PUC to exercise its authority to establish interim rates and charges for pole attachments.

5. The proposed interim pole attachment rate of \$6.00 per pole per year appears to be reasonable, as it is within the range of existing national pole attachment rates. The interim rate proposed by the parties in the Stipulation is "just" and "reasonable" pursuant to 12 GCA §§12015 and 12017.
6. It is further appropriate, at present, to postpone consideration of permanent pole attachment rates until the pending Federal Communications Commission rulemaking proceeding regarding pole attachment rate formulas is concluded.

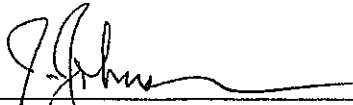
ORDERING PROVISIONS

After careful review and consideration of the above determinations, the Report and Recommendations of the ALJ, the Stipulation, 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:**

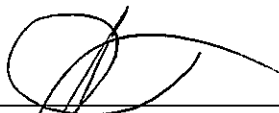
1. All rulings and orders of the ALJ in this proceeding are confirmed and ratified. All motions not heretofore granted or denied are denied. No other matters currently require discussion.
2. The ALJ Report filed herein is hereby adopted and approved.
3. The Stipulation of the parties, attached hereto as Exhibit "A", is also approved; effective January 1, 2011, the interim pole attachment rates charged by GPA to all telecommunications companies shall be Six Dollars \$6.00 per pole per year.
4. The interim pole attachment rate adopted herein shall be binding upon the parties to the Stipulation and to all other companies which presently have, or subsequently have attachments on GPA poles, until such time as a permanent pole attachment rate is set by the PUC.
5. The PUC will keep this docket open in order to conduct the further proceedings stipulated to by the parties. Further proceedings and a status hearing in this matter shall be scheduled upon the FCC's revision of its pole attachment rate formulas or on January 6, 2012 whichever is sooner.

6. The parties to the Stipulation, MCV, GTA, and GPA shall pay any outstanding Commission regulatory fees and expenses, including the expenses of conducting the hearing proceedings, in equal shares.

SO ORDERED this 31st day of January, 2011.




Jeffrey C. Johnson
Chairman




Rowena E. Perez
Commissioner

Michael A. Pangelinan
Commissioner



Joseph M. McDonald
Commissioner



Filomena M. Cantoria
Commissioner



BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN RE:)	DOCKET NO: 09-04
)	
GTA TELEGUAM AND)	STIPULATION REGARDING
GUAM POWER AUTHORITY)	INTERIM POLE ATTACHMENT
POLE ATTACHMENTS)	RATES CHARGED BY GUAM
)	POWER AUTHORITY
)	

Guam Cablevision LLC ("MCV"), GTA Teleguam LLC ("GTA") and Guam Power Authority ("GPA"), the parties in the above-captioned matter, hereby stipulate and agree as follows:

1. GTA filed a Complaint in this matter to request that the Public Utilities Commission establish a uniform and non-discriminatory rate for the placement of pole attachments on power poles owned by GPA.
2. The Parties have engaged in discussions regarding the appropriate formula established by the Federal Communications Commission ("FCC") for calculating the pole attachment rate. The Parties subsequently agreed to negotiate a uniform rate.
3. On May 21, 2010, the FCC issued an Order and Further Notice of Proposed Rulemaking on changes to its pole attachment rules and its implementation of Section 224 of the Communications Act of 1934, as amended.
4. The Parties agree that any changes to the FCC's pole attachment rules and pole attachment rate formulas will be relevant to determining an appropriate rate for attachments on power poles owned by GPA.
5. The Parties agree that an interim rate of Six Dollars (\$6.00) per pole per year shall be charged by GPA for pole attachments that provide cable or telecommunications services.
6. The Parties agree that the interim rate shall be effective as of January 1, 2011.

377173

Exhibit "A"

RECEIVED
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HORECKY & ASSOCIATES
Date: 1/10/2011
Time: 1:20 pm By: JW

Stipulation Regarding Interim Pole Attachment Rates
Charged by Guam Power Authority

7. The Parties agree that a status hearing to reconsider the interim rate shall be scheduled in this matter after the sooner of the FCC's revision of its pole attachment rate formulas or rules or one year from the date of this Stipulation.

THEREFORE, the Parties respectfully request that the Administrative Law Judge set an interim pole attachment rate of Six Dollars (\$6.00) per pole per year, effective January 1, 2011.

Respectfully submitted this 7th day of January, 2011.

GTA TELEGUAM LLC

By: 

Terrence M. Brooks
GTA General Counsel

CALVO & CLARK, LLP

Counsel for Guam Cablevision LLC dba MCV

By: 

Jennifer Calvo-Quitugua

GUAM POWER AUTHORITY

By: 

Graham Botha
Attorney for GPA

**Public Utilities Commission Special Meeting
January 31, 2011
Testimony – Senator Vicente (ben) Cabrera Pangelinan**



Håfa Adai Commissioners,

I come before you as a senior Senator of the 31st Guam Legislature, as the Chairman of the Committee on Appropriations, Taxation, Public Debt, Banking, Insurance, Retirement, and Land (Committee), and as a ratepayer. I appreciate the work and due diligence the Public Utilities Commission (PUC) has with regard to the rate increases of the agencies under its purview. Your careful deliberation of issues that may affect ratepayers aims to protect our ratepayers, the people of Guam.

The Guam Waterworks Authority (GWA) sold approximately \$118.8 million bonds in the municipal market on November 10, 2010. These funds were intended on being used toward projects that would bring the agency into compliance with the Safe Drinking Water Act and the Clean Water Act, based on a stipulated order with the federal government. According to Guam Public Law 30-145, "An act to amend section 4 of Public Law 28-71, Relative to approving the terms and conditions of the issuance of Guam Waterworks Authority Revenue Bonds," which was signed into law on May 17, 2010, the Guam Waterworks Authority is allowed to issue bonds on specific terms and conditions. The law outlines that the Guam Waterworks Authority had the authority to issue bonds with a principal amount not to exceed \$240 million at a net yield to bondholders not exceeding seven and one-half percent per annum.

Article 2, Chapter 14 of Title 12 of the Guam Code Annotated, of which Public Law 30-145 amends, also stipulates that of the amount of bonds issued by the Guam Waterworks Authority, \$20 million of the principal amount shall be used to pay the balance of the government of Guam Limited Obligation (Section 30) Series 2001A bond and any other portions of Bonds or Loans paid for by General Fund revenues for which the Guam Waterworks Authority has received proceeds. Guam Waterworks Authority only issued approximately \$118.8 million of the maximum \$240 million authorized by the Guam Legislature, of which, none has gone to fulfilling the letter of the law stated in Article 2, Chapter 14 of Title 12 of the Guam Code Annotated and Public Laws 28-71 and 30-145. I am requesting that before the PUC approve the use of the newly issued bond funds that the matter of Public Law 30-145 be settled.

The second matter of interest is the Guam Power Authority (GPA) issuance of debt in the past year. The REVENUE BONDS 2010 SERIES A included a Series 2010A Subordinate Lien Taxable Bonds to fill a Working Capital Fund (WCF) and to retire \$20 million Cathay Commercial Paper. According to the Guam Consolidated Commission on Utilities Resolution No. 2010-27, the Working

The approved use of the funds provided in the order were \$3 million for reimbursements and \$3.1 million as a contingency reserve for cost overruns on the Smart Grid Project or other approved bond projects.

My feedbacks on the August 30, 2010 PUC Order is simple:

- 1) If money borrowed through a bond was not needed to pay off the Cathay Loan then it should be used to relieve the ratepayers paying for the bond, not reimburse GPA for expenses already incurred.
- 2) Using the proceeds as a hedge against cost overruns on the Smart Grid project or other projects is absurd. The Smart Grid project has an existing budget of \$33.2 million dollars. GPA must be able to manage bid specifications and project execution according to budget. This type of contingency fund generally leads to unnecessary bells and whistles. The expectation of the people is that GPA project management be on budget and on-time.

It is my sincere hope that the commission reconsiders the August 30, 2010 order and channels the excess \$6 million in bond proceeds into rate relief for the consumers.

Lastly, there is the issue of unexpected \$5.1 million windfall to the Authority from the Bank of America settlement. Mr. Joaquin Flores has recently appealed to the CCU to apply the \$5.1 million dollars to the Working Capital Surcharge. Given my position on the Working Capital Surcharge, the application of the \$5.1 million dollars is better suited to offset any LEAC increase that this commission determines is warranted for the period February 2011 through July 2011.

As the rate setting body for the Guam Power Authority, Guam Waterworks Authority, Port Authority of Guam and Solid Waste Disposal, you are all well aware of the increases pushed onto consumers over the last several years. I am appealing to you to continue to exercise reasonableness to the cases presented to you by the utilities. Too often, the lawyers, consultants and executives charged with running the utilities overshadow the ratepayer at these hearings because the matters discussed are complicated and intimidating. I am counting on you to continue to protect those without the expertise and resources to come before you from any additional cost of living increases.

I thank you for the opportunity to address this body this evening and I look forward to future appearances on behalf of the people of Guam.

Si Yu`os Ma`åse

Vicente (ben) Cabrera Pangelinan
Senator

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION



GUAM POWER AUTHORITY
LEVELIZED ENERGY ADJUSTMENT
CLAUSE [LEAC]

GPA DOCKET 10-11

ORDER

In accordance with the protocol established by Guam Public Utilities Commission [PUC] Order dated January 29, 1996, as amended by Order dated March 14, 2002, Guam Power Authority [GPA], by Filing dated December 15, 2010, requested that the current LEAC factor [\$0.12465 per kWh] for its civilian customers be increased to \$0.15901 per kWh for meters read on and after February 1, 2011 and continuing until July 31, 2011.¹

After conducting a review of GPA's Filing, and engaging in communications with GPA, PUC Regulatory Consultant Georgetown Consulting Group, Inc. [GCG] filed its Report Re: GPA Request for a LEAC Factor Effective February 1, 2011.² In its investigation, GCG recommended that the PUC should rely upon the most recent information regarding fuel prices to determine the fuel factor for the LEAC.³ In its Report, GCG determined that the fuel price projections for the next six month period are higher than the fuel prices originally projected by GPA in its Petition.⁴ Based upon updated Morgan Stanley fuel price forecasts for both No. 2 and No. 6 oil, the January 11, 2011 price forecasts were higher than those projected by GPA in its Petition.⁵

Thus, in its Summary of LEAC Calculations [Table 1], GCG has updated the total projected fuel costs for the six month period ending July 31, 2011.⁶ GCG finds that GPA's total fuel costs for the six month period ending July 31, 2011 will be nearly \$2.6 Million more than originally projected by GPA.⁷ GCG's Report has also examined Fuel "Handling Costs."⁸ GCG recommends that the Commission

¹ GPA LEAC Filing, Docket 02-04, filed December 15, 2010; the basis for GPA's LEAC filing is that there has been an increase in fuel prices from \$71/bbl. to around \$81.00/bbl., which represents an increase in fuel costs from the prior LEAC period. A new LEAC Docket has now been opened as GPA Docket 10-11.

² GCG Report re GPA Request for a LEAC Factor Effective August 1, 2010, filed July 16, 2010, in Docket 02-04.

³ Id. at p. 1.

⁴ Id.

⁵ Id. at pgs. 2-5.

⁶ Id. at p. 2.

⁷ Id. at p. 2.

⁸ Id. at p. 6.

further consider whether certain items, such as L/C Charges and fuel management, handling and storage costs should continue to be recognized as a part of the LEAC factor.⁹

Using the December Morgan Stanley fuel price forecasts, GPA had originally projected in its Petition that credits from its fuel hedging contracts would be \$271,000; however, GCG indicated that, with the increased price projection using the January 11, 2011 Morgan Stanley fuel price forecasts, the credit will increase to nearly \$2 Million and is a direct offset to the further projected oil price increases.¹⁰ Another significant item of fuel handling expenses is the inventory valuation costs. Previously, the PUC had decided to increase or decrease the LEAC factor based upon changes in the fuel inventory value over the six month period.¹¹

For the period ending July 31, 2011, GPA originally requested approximately \$1 Million be included in the cost of fuel related to the forecasted increase in inventory cost levels over this period.¹² However, with the updated estimate of prices, the inventory valuation adjustment (amount recoverable for the next six months) should be \$2,220,534.¹³

In its January 26, 2009 Order, the PUC adopted a 7% line loss factor as an "interim standard" until the GPA transmission study is completed.¹⁴ In the July 27, 2010 Order, the PUC ordered that GPA file a Petition with a proposed schedule outlining a proposal and solutions for the development of new line loss standards. In addition GPA was ordered to file a position statement with PUC concerning whether differentiated LEAC rates should be implemented for customers served at different voltage levels.¹⁵

On October 15, 2010, GPA filed the requisite filings regarding Line Loss Standards and Separate LEAC Factors.¹⁶ There GPA requested that the existing line loss standard of 7% remain as a baseline until it completes certain projects regarding Smart Grid initiatives, Distribution System Improvements,

⁹ Id. at p. 6.

¹⁰ Id. at p. 7.

¹¹ Id. at p. 8.

¹² Id.

¹³ Id. at pgs. 8-9.

¹⁴ PUC Order GPA Levelized Energy Adjustment Clause [LEAC], GPA Docket 02-04, filed January 26, 2009.

¹⁵ PUC Order, GPA Levelized Energy Adjustment Clause [LEAC], GPA Docket 02-04, filed July 28, 2010.

¹⁶ GPA Filings Re: Line Loss Standards and Separate LEAC Factors, Docket No. 02-04, filed October 15, 2010.

Replacement of existing distribution transformers with high efficiently transformers, and Meter Task Force ongoing activities.¹⁷ GPA also said it presently lacks adequate loss data to be able to accurately establish separate fuel factors for the transmission level for “primary” customers. It suggests that it will have a fuller knowledge concerning loss data for the system when the Smart Metering project is installed throughout the island wide power system.¹⁸

GCG’s Report recommends that the PUC further consider line loss performance benchmarks for GPA.¹⁹ GCG continues to recommend that line losses be differentiated for LEAC rate purposes among customers served at different voltage levels, but that GPA could present such differentiated LEAC rates in the upcoming Cost of Service Study.²⁰

After carefully reviewing the record in this proceeding and the January 20, 2011 Report of GCG, and after discussion at a duly noticed public meeting held on January 31, 2011, for good cause shown and on motion duly made, seconded and carried by affirmative vote of the undersigned Commissioners, the Guam Public Utilities Commission hereby **ORDERS THAT:**

1. A LEAC factor of \$0.16153 per kWh shall be used by GPA for all civilian customer bills, for meters read on and after February 1, 2011 to recover its forecasted fuel and related expenses, in accordance with the right hand column of Table 1 as set forth in the GCG Report dated January 20, 2011. This change reflects an 18.53% increase in the total bill for a residential customer utilizing an average of 1,000 kilowatt hours per month.
2. GPA should file its next LEAC adjustment filing on or before June 15, 2011.
3. At the present time, the PUC affirms its prior determination that a 7% line loss factor is the prevailing “interim standard.” Due to the present initiatives which GPA is implementing and distribution system improvements, the interim standard should not be altered at the present time.

¹⁷ Filing Re: Line Loss Standards, *supra*, at p.1.

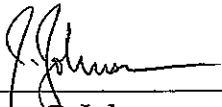
¹⁸ GPA Filing Re: Separate LEAC Factors, Docket 02-04, filed October 15, 2010 at p. 2-3.

¹⁹ GCG Report Re: GPA Request for a LEAC Factor Effective February 1, 2011, filed January 19, 2011 in Docket 10-11.

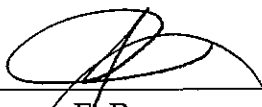
²⁰ *Id.* at p. 11.

4. On or before June 15, 2011, GPA shall include with its LEAC adjustment filing a report to PUC on the status of its exiting initiatives, including timelines and reports, regarding Smart Grid initiatives, distribution system improvements, replacement of existing transformers, and meter taskforce ongoing activities. GPA shall therein indicate, in detail, the status and accuracy of its loss data, and its ability to propose a permanent loss standard.
5. In next LEAC filing, GPA should also include: (1) its position as to whether certain items, such as L/C Charges and fuel management, handling and storage costs should continue to be recognized as a part of the LEAC factor; and (2) its position as to whether, as a result of its initiatives and distribution system improvements, GPA loss data has improved to an extent sufficient to enable it to develop loss factors for primary, sub-transmission, and transmission level LEAC differentiated rates, and if so, the timeframe for implementation of such differentiated LEAC rates.
6. The present increase in fuel costs is of great concern to the Commissioners, as such increase imposes financial burdens upon the ratepayers of Guam. No later than the April PUC Meeting, the Commissioners will examine measures which can be taken by the PUC to ameliorate the impact of the increase in fuel costs. Such possible measures include, but are not necessarily limited to: (1) the review of the \$5.1 Million settlement recently received by GPA relative to investment proceeds, and possible allocation of such settlement funds to offset the impact of the LEAC increase; and (2) reallocation of the \$3.1 Million approved by the PUC in its August 31, 2010 Order (GPA Docket 10-01) for use by GPA in payment of bond project and Smart Grid initiative cost overruns as an offset to the LEAC increase. The Administrative Law Judge is hereby instructed to commence an investigation of such measures, to undertake any necessary proceedings, and to make appropriate recommendations to the Commission.
7. GPA 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 §§12002(b) and 12024(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.


Dated this 31st day of January, 2011.



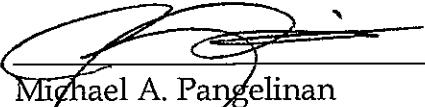
Jeffrey C. Johnson
Chairman




Rowena E. Perez
Commissioner



Joseph M. McDonald
Commissioner



Michael A. Pangelinan
Commissioner



Filomena M. Cantoria
Commissioner

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN RE: GDP MARINA RENOVATION,
PHASE 1, CONSTRUCTION

PAG Docket No. 10-03

ORDER



BACKGROUND

This matter comes before the Guam Public Utilities Commission ("GPUC") upon the request of the Port Authority of Guam ("PAG") for approval of its proposed "Agreement Between Jose B. Leon Guerrero Commercial Port and with Black Construction Corporation" (the "Black Construction Contract"), made on December 1, 2010.

DETERMINATIONS

Section 12004 of Title 12 of the Guam Code Annotated provides that a public utility shall not "enter into any contractual agreements or obligations which could increase rates and charges prior to the written approval of the Commission." Section 12000(a) of Title 12 of the Guam Code Annotated defines PAG as a public utility.

On December 27, 2010, the ALJ issued an ALJ Report regarding his review of the Black Construction Contract. In the Report, the ALJ found that the purpose of the Black Construction Contract is to obtain services related to the Gregorio D. Perez Marina Renovation & Site Improvements, Phase 1 Project. The Gregorio D. Perez Marina Renovation & Site Improvements, Phase 1 Project is a renovation project funded by federal grants and aimed at improving PAG's current infrastructure by renovating its marina. The Black Construction Contract is the agreement between PAG and Black Construction to execute the first phase of the renovation project.

ATTACHMENT F

The ALJ additionally found that the terms of the proposed Black Construction Contract were reasonable. In particular, the ALJ determined that the Black Construction Contract contained the standard provisions used in most construction contracts. In addition, the ALJ further found that the \$1,252,000.00 contract price was reasonable for Black Construction's services related to the marina renovation project. Moreover, the ALJ found that the nine (9) month contract term was a reasonable amount of time to complete the project.

Finally, the ALJ further found that the Black Construction Contract would not affect PAG's rates as the entire project is federally funded by the U.S. Department of Interior, Office of Insular Affairs, under GUAM-CIP-2006-1 Grant No. GR670090 and GUAM-CIP-2007-1 Grant No. GR770061. Accordingly, the terms of the Black Construction Contract would not affect PAG's operating budget. Therefore, based on his findings, the ALJ recommended that the Black Construction Contract be approved by the GPUC.

The Commission hereby adopts the findings made in the ALJ Report and, therefore, issues the following.

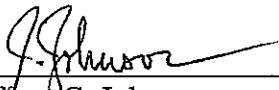
ORDERING PROVISIONS

Upon consideration of the record herein, the request made by PAG, the December 27, 2010 ALJ Report, and for good cause shown, on motion duly made, seconded and carried by the affirmative vote of the undersigned Commissioners, the Commission hereby ORDERS that:

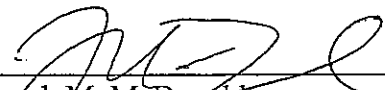
1. PAG is hereby authorized to accept the terms and conditions set forth in the Black Construction Contract, which proposed form was submitted to the GPUC on December 1, 2010 for its approval.
2. PAG is further ordered to pay the GPUC's regulatory fees and expenses, including and without limitation, consulting and counsel fees, and the fees and expenses

associated with conducting the review and hearing process. Assessment of the GPUC's regulatory fees and expenses is authorized pursuant to 12 G.C.A. §§ 12002(b) and 12024(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.


SO ORDERED this 31st day of January, 2011.




Jeffrey C. Johnson
Chairman




Joseph M. McDonald
Commissioner



Rowena E. Perez
Commissioner



Filomena M. Cantoria
Commissioner



Michael A. Pangelinan
Commissioner

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

ORDER



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.

DETERMINATIONS

1. On January 24, 2011, the Administrative Law Judge (the "ALJ") of the PUC issued his ALJ Report regarding GWA's petition for approval of the 2010 Series Bond projects.

2. In the January 24, 2011 ALJ Report, the ALJ found that on November 23, 2010, GWA closed on the Series Bond that provides a net total of about \$87.4 million for capital improvement projects. The ALJ further found that GWA's Series Bond projects were set forth in its November 23, 2010 Engineering Capital Improvement Plan (the "CIP"), which was attached as "Exhibit A" to GWA's January 12, 2011 petition. The CIP described a number of capital improvement projects aimed at expanding and improving GWA's infrastructure.

3. The ALJ determined that the capital improvement projects identified and discussed in the CIP were the result of several hours of consultation and development by GWA's management and engineers, as well as by GWA's independent engineering consultants. The

ATTACHMENT G

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

4. The ALJ additionally found that GWA furnished satisfactory documentation itemizing all of its CIP projects from now until 2015; and, that GWA had 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.

5. The ALJ further found that 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 Series Bond projects, along with the corresponding budgets for such projects, were reasonable and necessary for the expansion and improvement of Guam's water and wastewater system.

6. Thus, the ALJ recommended that the PUC approve all of the Series Bond projects identified in GWA's January 12, 2011 petition, as well as for the amounts requested therein.

The Commission hereby adopts the findings made in the ALJ Report and, therefore, issues the following.

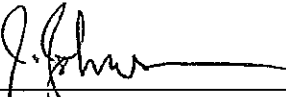
ORDERING PROVISIONS

Upon consideration of the record herein, the petition filed by GWA, the January 24, 2011 ALJ Report, and for good cause shown, on motion duly made, seconded and carried by the affirmative vote of the undersigned Commissioners, the Commission hereby ORDERS that:


1. GWA is hereby authorized to utilize the proceeds of the 2010 Series Bond for the purposes set forth in GWA's CIP, which is attached and incorporated hereto as "Exhibit A."

2. GWA is further ordered to pay the PUC's regulatory fees and expenses, including and without limitation, consulting and counsel fees, and the fees and expenses associated with conducting the review process. Assessment of the GPUC's regulatory fees and expenses is authorized pursuant to 12 G.C.A. §§ 12002(b) and 12024(b), and Rule 40 of the Rules of Practice and Procedure before the Public Utilities Commission.


SO ORDERED this 31st day of January, 2011.



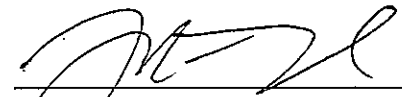
Jeffrey C. Johnson
Chairman




Rowena E. Perez
Commissioner



Michael A. Pangelinan
Commissioner



Joseph M. McDonald
Commissioner



Filomena M. Cantoria
Commissioner

EXHIBIT A



GUAM WATERWORKS AUTHORITY

Good Water Always

ENGINEERING CAPITAL IMPROVEMENT PLAN

2011-2015

November 23, 2010

Approved by CCU November 24, 2010

ENGINEERING CAPITAL IMPROVEMENT PLAN 2011-2015

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ENGINEERING CAPITAL IMPROVEMENT PLAN 2011-2015

NARRATIVE

Developing the Capital Improvement Plan (CIP)

The Engineering CIP is GWA's five-year blueprint for creating, maintaining, renewing, and replacing the crucial infrastructure that will support Guam's continued growth. This CIP was developed to include a narrative and project description sheets detailing the projects. Other documents, such as the Master Plan, 2006 Stipulated Order, and Production Plan provided valuable information and guidance in the preparation of the CIP.

Individual projects will continue to be subjected to ongoing review by the Chief Engineer, General Manager GWA, General Manager CUS, Consolidated Commission on Utilities (CCU) and possibly the Public Utilities Commission (PUC).

The CIP is an important public communication medium. The CIP gives residents and businesses a view of GWA's direction for capital improvement and a better understanding of the Island's ongoing need for stable revenue sources to fund large or multi-year capital projects. The CIP is also an important operational document, providing GWA Engineering, Operation, Finance, and support staff with a blue print of the overall direction and specific project GWA plans on implementing to improve the utility.

Definition of an Engineering Capital Improvement Project

For the purposes of the Engineering CIP, a capital expenditure is one that results in acquiring and/or replacing GWA's capital assets. Major projects are those that cost more than \$50,000 or are listed in the 2006 Stipulated Order and/or Master Plan. Water production facilities, water distribution systems, wastewater collection systems, wastewater treatment plants, and major one-time equipment acquisitions are all examples of capital improvements.

Carryover Projects/Fund Balance

Due to the nature of capital projects, the life of a project may span across fiscal years. As funds are received to fund a project, they are accumulated in the appropriate capital fund and expended as projects progress. When the funds are not spent in one year they remain in the fund balance to be used in the future. This is also referred to as carryover. As GWA refines the annual CIP, these carryover projects will be redefined into areas of contractual obligation, and ongoing projects will be re-appropriated in the following year as all of the financing is reevaluated to ensure project funding and funding viability.

ENGINEERING CAPITAL IMPROVEMENT PLAN 2011-2015

NARRATIVE (Continued)

Operating and Capital Budget Relationship

The CIP also impacts the operating budget. As projects are completed, operating funds are necessary for routine maintenance and operation costs such as utilities, staffing, repairs, and equipment maintenance. For example, when the Supervisory Control and Data Acquisition (SCADA) system project is delivered, extensive operational, maintenance, and engineering support are required for a reliable and operable SCADA system.

CIP Organization

This fiscally constrained CIP includes project summary tables, funding source tables, funding committed provide by the Department of Defense funding, and project sheets.

Department of Defense Funding

The Department of Defense Funding is from the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010, and through commitments made through a series of meeting between Department of Defense and Guam Waterworks Authority in 2010. The plan does not include the all the \$700M in unspecified utility upgrade described in the September 3, 2010 letter from Jared Blumenfeld, USEPA Region IX Administrators included in the Record of Decision.

This CIP was approved by CCU November 24, 2010 marking the first detailed Capital Improvement Plan to ensure GWA continues to provide excellence in water and wastewater services. I acknowledge this project was truly a team effort with the combined energy of the engineering staff and the support of the Finance Department. Specifically, I want to recognize and thank Greg Cruz, Thomas Cruz, and Prudencio Aguon.

Martin Roush P.E.
Chief Engineer

11/26/2010

SUMMARY TABLES:

Summary Table Potable Water (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
PW 05-01	Ground Water Disinfection	\$727				
PW 05-02	Water Reservoir Condition Assessment	\$439				
PW 05-03	Santa Rita Springs Booster Pump Rehabilitation, Phase II	\$303			\$125	
PW 05-04	Ugum Water Treatment Plant Refurbishment	\$200				
PW 05-05	"A" Series Well Transmission Line	\$745	\$600	\$59		
PW 05-06	Water Booster Pump Station	\$500			\$3,766	
PW 05-07	Meter Replacement Program	\$3,500				\$6,000
PW 05-08	Barrigada Tank Repair/Replacement	\$2,000				
PW 05-09	Leak Detection / Line Replacement	\$3,077			\$364	
PW 05-10	Potable Water System Planning	\$200		\$500	\$800	
PW 05-11	Implement Ground Water Rule					
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade		\$1,200			
PW 05-13	Deep Well Rehabilitation		\$548			
PW 05-14	New Deep Wells at Down Hard Well Sites		\$3,773			
PW 05-15	Rehabilitation of Asan Springs Ground Reservoir	\$900				
PW 05-16	Master Meters	\$100	\$1,500			
PW 09-01	Ugum Water Treatment Plant Intake Modifications	\$1,470	\$2,200			
PW 09-02	Water Wells	\$2,356	\$1,000		\$9,500	\$5,500
PW 09-03	Water Distribution System Pipe Replacement	\$1,848	\$5,384	\$3,500	\$5,698	\$5,520
PW 09-04	Pressure Zone Realignment/Development 2005 Impr.	\$1,150	\$2,400			\$1,400
PW 09-05	Northern System Water Distribution System 2005 Impr.		\$2,425	\$300	\$875	\$500
PW 09-06	Central Water Distribution System 2005 Improvements	\$600	\$300	\$600		
PW 09-07	Southern Water Distribution System 2005 Improvements	\$500	\$650	\$1,300		
PW 09-08	Mechanical/Electrical Equipment Replacement	\$500	\$430	\$860		
PW 09-09	Water Reservoir Internal/External Corrosion Asmt.	\$500				
PW 09-10	Water Reservoir Internal/External Corrosion Rehb.	\$800	\$800	\$800	\$400	\$400
PW 09-11	Water System Reservoirs 2005 Improvements	\$3,697	\$8,000	\$5,000	\$3,000	\$12,503
PW 11-01	Distribution System Upgrades		\$1,500	\$1,682	\$618	
PW 11-02	Ugum Water Treatment Plant Reservoir Replacement		\$1,322	\$2,350		
Total		\$26,112	\$34,032	\$16,951	\$25,146	\$31,823

Summary Table Wastewater (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
WW 05-01	Old Agat Wastewater Collection (Phase II)	\$1,200				
WW 05-02	Collection Line Upgrade/ Collection System Upgrades*					
WW 05-03	NDWTP Diffuser Installation*					
WW 05-04	Wastewater System Planning	\$1,500				
WW 05-05	Wastewater Vehicles	\$235				
WW 05-06	Wastewater Pump Station Upgrades*					
WW 05-07	NDWWTP - Chlorine Tanks	\$250				
WW 05-08	Umatac-Merizo STP Improvements*					
WW 09-01	LS Priority 1 Upgrades*					
WW 09-02	Moratorium	\$5,000				
WW 09-03	Old Agat Collection Continuation (Phase III)	\$1,200				
WW 09-04	Manhole Frame Seal Repair*					
WW 09-05	Agat Manhole Rehabilitation					
WW 09-06	Wastewater Collection System Repl./Rehabilitation*					
WW 09-07	Tumon Bay Sewer Upgrades		\$100			
WW 09-08	Facilities Plan/Design for Baza Gardens STP Repl.		\$2,575			
WW 09-09	Facilities Plan/Design for the N. District STP Bio-solids*					
WW 09-10	Facilities Plan/Design for Agat-Santa Rita STP Repl.	\$600	\$1,624			
WW 09-11	WWTP Priority 1 Upgrades					
WW 11-01	Priority 1 Sewer Upgrades - Agat District				\$6,751	
WW 11-02	Priority 1 Sewer Upgrades - Baza Garden District	\$650			\$2,500	
WW 11-03	Baza Gardens STP Replacement			\$3,567	\$8,267	\$12,078
WW 11-04	Facilities Plan/Design for the Umatac-Merizo STP Impr.					\$140
WW 11-05	Facilities Plan for Hagatna STP Impr. & Effluent WWPS*					
WW 11-06	Hagatna STP Improvements and Effluent WWPS*					
WW 11-07	Northern District STP Expansion - Biosolids Electrical*					
WW 11-08	Agat/Santa Rita STP Replacement			\$14,289		
Total		\$10,635	\$4,299	\$17,856	\$15,518	\$12,218

* See Department of Defense Funding Table listed below

SUMMARY TABLES (continued):

Summary Table Electrical Engineering (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
EE 05-01	Well Electrical Protection	\$134				
EE 05-02	SCADA Pilot Project	\$300				
EE 09-01	Wastewater Pumping Station Electrical Upgrade			\$614		
EE 09-02	Electrical Upgrade - Water Wells	\$500	\$500	\$2,000	\$500	
EE 09-03	Electrical Upgrade - Water Booster Pump Stations			\$650		
EE 09-04	Electrical Upgrade -Water Booster Pump Stations			\$350		
EE 09-05	Electrical Upgrade - Other Water Booster Pump Stations			\$250		
EE 09-06	SCADA Improvements – Phase 1	\$250				
EE 09-07	SCADA Improvements – Phase 2	\$1,100				
EE 09-08	SCADA Improvements – Phase 3	\$1,500	\$1,000			
EE 09-09	SCADA Improvements – Phase 4		\$850	\$750	\$1,250	
Total		\$3,784	\$2,350	\$4,614	\$1,750	

Summary Table Miscellaneous (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
MC 05-01	Laboratory Modernization	\$400	\$400	\$400		
MC 05-02	Land Survey	\$743	\$500	\$500	\$493	
MC 09-01	General Plant Improvements / Water Distribution System	\$7,070	\$8,800	\$7,500	\$3,342	\$997
Total		\$8,213	\$7,700	\$8,400	\$3,835	\$997

Summary By Project Type (X 1,000)

		2011	2012	2013	2014	2015
PW	Potable Water	\$26,112	\$34,032	\$16,951	\$25,146	\$31,823
WW	Wastewater	\$10,635	\$4,299	\$17,856	\$15,518	\$12,218
EE	Electrical Engineering	\$3,784	\$2,350	\$4,614	\$1,750	
MC	Miscellaneous	\$8,213	\$7,700	\$8,400	\$3,835	\$997
Total		\$48,744	\$48,381	\$47,821	\$46,249	\$45,038

FUNDING TABLES:

Funding Source Key:

2005 Bond	B2005
2011 Bond	B2011
2013 Bond	B2013
System Development Charge	SDC
Short Term Loan	STL
Internally Funded CIP	IFCIP
Grants	GRANT

Potable Water Funding Table (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
PW 05-01	Ground Water Disinfection	\$727 B2005				
PW 05-02	Water Reservoir Condition Assessment	\$439 B2005				
PW 05-03	Santa Rita Springs Booster Pump Rehabilitation, Phase II	\$303 B2005			\$125 B 2013	
PW 05-04	Ugum Water Treatment Plant Refurbishment	\$200 B2005				
PW 05-05	"A" Series Well Transmission Line	\$745 B 2005	\$600 B 2011	\$59 B 2013		
PW 05-06	Water Booster Pump Station	\$500 B 2011			\$3,766 B 2013	
PW 05-07	Meter Replacement Program	\$1,000 B 2005 \$2,500 B 2011				\$6,000 B 2013
PW 05-08	Barrigada Tank Repair/Replacement	\$2,000 Grant				
PW 05-09	Leak Detection / Line Replacement	\$1,032 B2005 \$2,045 GRANT			\$364 B2013	
PW 05-10	Potable Water System Planning	\$200 B2011		\$500 B2013	\$800 B2013	
PW 05-11	Implement Ground Water Rule					
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade		\$1,200 B2011			
PW 05-13	Deep Well Rehabilitation		\$548 B2011			
PW 05-14	New Deep Wells at Down Hard Well Sites		\$3,773 B2011			
PW 05-15	Rehabilitation of Asan Springs Ground Reservoir	\$900 B2011				
PW 05-16	Master Meters	\$100 B2011	\$1,500 B2011			
PW 09-01	Ugum Water Treatment Plant Intake Modifications	\$1,470 B2011	\$2,200 B2011			
PW 09-02	Water Wells	\$356 GRANT \$2,000 B2011	\$1,000 GRANT		\$2,200 B2013 \$7,300 SDC	\$5,500 B2013
PW 09-03	Water Distribution System Pipe Replacement	\$1,848 GRANT	\$384 B2011 \$5,000 GRANT	\$3,500 GRANT	\$2,000 B2013 \$3,698 GRANT	\$5,520 B2013
PW 09-04	Pressure Zone Realignment / Development 2005 Impr.	\$1,150 B2011	\$2,400 B2011			\$1,400 B2013
PW 09-05	Northern System Water Distribution System 2005 Impr.		\$2,425 B2011	\$300 B2011	\$875 B2013	\$500 B2013
PW 09-06	Central Water Distribution System 2005 Improvements	\$600 B2011	\$300 B2011	\$300 B2011 \$300 B2013		
PW 09-07	Southern Water Distribution System 2005 Improvements	\$500 B2011	\$650 B2011	\$650 B2011 \$650 B2013		
PW 09-08	Mechanical/Electrical Equipment Replacement	\$500 B2011	\$430 B2011	\$430 B2011 \$430 B2013		
PW 09-09	Water Reservoir Internal/External Corrosion Asmt.	\$500 B2011				
PW 09-10	Water Reservoir Internal/External Corrosion Rehb.	\$800 B2011	\$800 B2011	\$800 B2011	\$400 B2013	\$400 B2013
PW 09-11	Water System Reservoirs 2005 Improvements	\$3,697 B2011	\$8,000 B2011	\$5,000 B2013	\$3,000 B2013	\$12,503 B2013
PW 11-01	Distribution System Upgrades		\$1,500 B2011	\$1,682 B2011	\$618 B2013	
PW 11-02	Ugum Water Treatment Plant Reservoir Replacement		\$1,322 B2011	\$2,350 B2011		
Total		\$26,112	\$34,032	\$16,951	\$25,146	\$31,823

FUNDING TABLES (continued):

Wastewater Funding Table (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
WW 05-01	Old Agat Wastewater Collection (Phase II)	\$1,200 GRANT				
WW 05-04	Wastewater System Planning	\$1,500 B2011				
WW 05-05	Wastewater Vehicles	\$235 B2011				
WW 05-07	NDWWTP - Chlorine Tanks	\$250 B2011				
WW 09-02	Moratorium	\$5,000 STL				
WW 09-03	Old Agat Collection Continuation (Phase III)	\$1,200 GRANT				
WW 09-07	Tumon Bay Sewer Upgrades		\$100 B2011			
WW 09-08	Facilities Plan/Design for Baza Gardens STP Repl.		\$1,250 B2011 \$1,325 GRANT			
WW 09-10	Facilities Plan/Design for Agat-Santa Rita STP Repl.	\$600 B2011	\$300 B2011 \$1,324 GRANT			
WW 09-11	WWTP Priority 1 Upgrades				\$2,451 GRANT \$4,300 SDC	
WW 11-01	Priority 1 Sewer Upgrades – Agat District				\$2,500 GRANT	
WW 11-02	Priority 1 Sewer Upgrades – Baza Garden District	650 B2011				
WW 11-03	Baza Gardens STP Replacement			\$3,567 B2011	\$3,267 B2013 \$3,000 SDC	\$12,078 B2013
WW 11-04	Facilities Plan/Design for the Umatac-Merizo STP Impr.					\$140 B2013
WW 11-08	Agat/Santa Rita STP Replacement			\$2,968 B2011 \$6,172 B2013 \$5,149 GRANT		
Total		\$10,635	\$4,299	\$17,856	\$15,518	\$12,218

Electrical Engineering Funding Table (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
EE 05-01	Well Electrical Protection	\$108 B2005 \$26 B2011				
EE 05-02	SCADA Pilot Project	\$300 B2011				
EE 09-01	Wastewater Pumping Station Electrical Upgrade			\$614 B2013		
EE 09-02	Electrical Upgrade - Water Wells	\$500 B2011	\$500 B2011	\$2,000 B2011	\$500 B2013	
EE 09-03	Electrical Upgrade - Water Booster Pump Stations			\$325 B2011 \$325 B2013 \$650		
EE 09-04	Electrical Upgrade -Water Booster Pump Stations			\$350 B2011		
EE 09-05	Electrical Upgrade - Other Water Booster Pump Stations			\$250 B2011		
EE 09-06	SCADA Improvements – Phase 1	\$250 B2011				
EE 09-07	SCADA Improvements – Phase 2	\$1,100 B2011				
EE 09-08	SCADA Improvements – Phase 3	\$1,500 B2011	\$1,000 B2011			
EE 09-09	SCADA Improvements – Phase 4		\$850 B2011	\$750 B2013	\$1,250 B2013	
Total		\$3,784	\$2,350	\$4,614	\$1,750	

FUNDING TABLES (continued):

Miscellaneous Funding Table (X 1,000)

CIP #	Name	2011	2012	2013	2014	2015
MC 05-01	Laboratory Modernization	\$400 B2011	\$400 B2011	\$400 B2011		
MC 05-02	Land Survey	\$243 B2005 \$500 B2011	\$500 B2011	\$500 B2011	\$493 B2013	
MC 09-01	General Plant Improvements / Water Distribution System	\$6,570 B2011 \$500 INCIP	\$4,800 B2011 \$2,000 INCIP	\$3,000 B2011 \$2,000 B2013 \$2,500 INCIP	\$2,342 B2013 \$1,000 INCIP	\$997 B2013
Total		\$8,213	\$7,700	\$8,400	\$3,835	\$997

Funding Source Summary (X 1,000)

	Source	2011	2012	2013	2014	2015	Total
B2005	2005 Bond	\$4,797					\$4,797
B2011	2011 Bond	\$26,798	\$37,732	\$19,872			\$87,402
B2013	2013 Bond			\$16,800	\$22,000	\$45,038	\$83,838
STL	Short Term Loan	\$5,000					\$5,000
SDC	System Dev. Charge				\$14,600		\$14,600
GRANT	Grants	\$8,649	\$8,649	\$8,649	\$8,649		\$43,245
IFCIP	Internally Funded CIP	\$500	\$2,000	\$2,500	\$1,000		\$6,000
		\$48,744	\$48,381	\$47,821	\$46,249	\$45,038	

Department of Defense (DoD) Funding

DoD Funded GWA Wastewater CIP's

CIP #	Name
WW 05-02	Collection Line Upgrade/ Collection System Upgrades
WW 05-03	NDWTP Diffuser Installation
WW 05-06	Wastewater Pump Station Upgrades
WW 09-01	LS Priority 1 Upgrades
WW 09-02	Moratorium
WW 09-04	Manhole Frame Seal Repair
WW 09-06	Wastewater Collection System Repl./Rehabilitation
WW 09-09	Facilities Plan/Design for the N. District STP Bio-solids
WW 11-05	Facilities Plan for Hagatna STP Impr. & Effluent WWPS
WW 11-06	Hagatna STP Improvements and Effluent WWPS
WW 11-07	Northern District STP Expansion – Biosolids Electrical

DoD Wastewater Project Description

Project	Project Details	GWA CIP Included
Northern District WWTP	Interim Capacity 8-9 MGD	
	Phase 1: Primary Capacity 12 MGD	WW 05-03, WW 11-07
	Phase 2: Secondary Capacity 12 MGD	
	Phase 3: Final Capacity 16 MGD	
Hagatna WWTP	Phase 1: Primary Capacity 12 MGD	WW 11-05, WW 11-06
	Phase 2: Secondary Capacity 12 MGD	
Collection System Improvements	Central and Northern Systems	WW 05-02, WW 05-06, WW 09-01 WW 09-02, WW 09-04, WW 09-06 WW 09-09

Estimated DoD Funding

CIP	Project Details	2011	2012	2013	2014	2015
DOD-01	NDWWTP Interim Capacity 8-8MGD	\$10,000				
DOD-02	NDWWTP Phase 1: Primary Capacity 12 MGD	\$60,000				
DoD-03	NDWWTP Phase 2: Secondary Capacity 12MGD	\$100,000				
DoD-04	NDWWTP Phase 3: Final Capacity 16 MGD	\$29,000				
DoD-05	HWWTP Phase 1: Primary Capacity 12 MGD			\$15,000		
DoD-06	HWWTP Phase 2: Secondary Capacity 12MGD			\$135,000		
DoD-07	Central and Northern Systems Wastewater System	\$82,000				
DoD-08	Water Transmission loop in Northern Guam		\$159,000			
Total	\$580,000	\$271,000	\$159,000	\$150,000		

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-01

Name of Project: Ground Water Disinfection

Reference Documents:

- a) Stipulated Order 2006, Item 12 (C) Ground Water Chlorination Systems - Due April 1, 2007.
There is \$12,000 in fines to date.

Project Description:

Design of this project is complete. The remaining scope includes the upgrade and construction of new chlorination systems for 99 deep wells and one spring source.

Project Justification:

This project is identified in the Stipulated Order 2006, Item 12(C).

Financing Options & Grants:

The source of funding for this project will be the 2005 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$875,000
2011	Construction	\$727,000
2012		
2013		
2014		
2015		
Project Total		\$1,602,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-02

Name of Project: Water Reservoir Condition Assessment

Reference Documents:

- a) Stipulated Order 2006, Item 38(C) - Water Reservoir Condition Assessment - Due March 1, 2008.
There is \$19,000 in fines to date.
- b) Phase 1 Summary Report for inspection of water storage tanks, October 17, 2008.
- c) CIP PW 09-08, 09 & 10

Project Description:

This project includes professional engineering service and construction service contracts to conduct an assessment of the structural integrity and soundness for all GWA reservoirs. The assessment will include internal and external inspections from which recommendations will be provided in the form of a work plan and schedule.

Project Justification:

This project is identified in the Stipulated Order 2006, Item 38(C).

Financing Options & Grants:

The source of funding for this project will be the 2005 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Assessment/Planning	\$439,000
2012		
2013		
2014		
2015		
Project Total		\$439,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 05-03

Name of Project: Santa Rita Springs Booster Pump Rehabilitation, Phase II

Reference Documents:

- a.) Stipulated Order 2006, item 44. Basis of Design Santa Rita Springs Booster Pump Rehabilitation Project, July 2005.
- b.) GWA Engineering Division, *Potable Water Production Enhancement Plan*, June 10, 2010.

Project Description:

Phase I of the project completed the Route 5 Transmission Line and a portion of the Santa Rita Booster Station. Phase II includes additional improvements to the booster station, specifically the impound reservoir. Additional pressure regulating valves are required to optimize the distribution system.

Project Justification:

This project is identified in the Stipulated Order 2006, Item 44. The new external pressures that affect the current production issue are as follows. GEPA's Water Resources Management Program (WRMP) is responsible for the protection of the aquifer. The Guam aquifer has a fresh water lens that rests on salt water. An early warning indicator of the stress on the fresh water lens is the chloride levels which measure the amount of sea water in the lens. Based on GEPA 2009 Annual Production Well Inspection Report, 13 of GWA's wells were required to decrease production due to the chloride levels; and 16 wells were approaching the chloride limit. One approach to supplementing the water supply due to the decrease in production of these 13 wells is to maximize the use of GWA's surface water and ground water. It is estimated that an increase in production of 2 MGD is needed to offset this loss in production. In June 24, 2008 and December 15, 2009 the Navy notified GWA that GWA adhered to the allocation of 3.5 MGD. In the most recent letter however, GWA's water purchase of 4.1 MGD cannot be continued by the Navy this dry season.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$1,000
2011	Construction	\$303,000
2012		
2013		
2014		\$125,000
2015		
Project Total		\$429,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-04

Name of Project: Ugum Water Treatment Plant Refurbishment

Reference Documents:

- a) Stipulated Order 2006, Item 41 - Ugum Surface Water Treatment Plant - Due January 5, 2008.
There is \$9,000 in fines to date.
- b) CIP PW 09-01 Ugum Water Treatment Plant Intake Modifications.

Project Description:

This project will renovate the Ugum Treatment Plant. The refurbishment will include the conversion of existing conventional surface water plant to a micro-filtration system; replacement of electrical control systems; replacement of finished water pumps; installation of SCADA equipment; and the refurbishment of the backwash waste handling system.

Project Justification:

The Ugum Treatment Plant is a vital drinking water source. An integrated approach is needed to ensure the reliability of this treatment plant.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management Services, and Major Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Construction	\$1,057,000
2011		\$200,000
2012		
2013		
2014		
2015		
Project Total		\$1,257,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-05

Name of Project: A-Series Well Transmission Line

Reference Documents:

- a) Stipulated Order 2006, Item 38(B), Sinajana Water Transmission Line, Due June 30, 2008. There is \$9,000 in fines to date.

Project Description:

Design and construction of approximately 24,800-feet of 8, 12, and 24-inch water transmission lines between the Chaot and Agana Heights water storage tanks; the connection of 7 existing A-series wells to the transmission line, and chlorination equipment at each of the two storage tanks. The new pipeline will be a dedicated transmission line to the storage tanks. This project is broken down to 4 phases. Phase 1 is completed, Phase 2a is under construction, Phase 2b is pending contact approval, and Phase 3 is currently in the planning phase. Phase 4 will provide the water service area with the acceptable pressure once the transmission lines are put in service.

Project Justification:

This project is identified in the Stipulated Order 2006, Item 38(B)

Financing Options & Grants:

The source of funding for this project will be the 2005 bond, 2011 bond, and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Construction	\$1,805,000
2011		\$745,000
2012		\$600,000
2013		\$59,000
2014		
2015		
Project Total		\$3,209,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-06

Name of Project: Water Booster Pump Station

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-13

Project Description:

The 2005 hydraulic model for GWA's three water systems identified deficiencies in water booster pump capacity to provide adequate supply to areas in the Southern and Central water systems.

Project Justification:

This project will provide additional booster pump capacity to ensure adequate supply to affected areas.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Design/Construction	\$500,000
2012		
2013		
2014		\$3,766,000
2015		
Project Total		\$4,266,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 05-07

Name of Project: Meter Replacement Program

Reference Documents:

- a) Stipulated Order 2006, Item 14: Due: November 30, 2007. There is \$30,000 in fines to date.

Project Description:

The project will continue to replace all GWA customer water (mechanical) meters with AMR (automatic meter reading) meters. This project will replace old, underperforming and broken meters. The AMR meters will allow data logging and electronic collection of monthly metering data.

Installation began December 2005. Almost all (97.2%) of the large commercial meters and 68% of the residential meters have been changed. Substantial completion of the meter change out has not resulted in expected revenue gains because the new meters and the electronic loggers/transmitters have been problematic. Installation of the remaining meters is on hold until the metering problems are resolved.

Project Justification:

This project will develop a water meter improvement program to ensure that each connection to the three public water systems has an accurate and accessible water meter that is read monthly and billed. Currently, GWA's unaccounted water rate is over 50%. It is believed that a portion of this loss is due to leakage and a portion is attributable to metering problems.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond, 2011 bond and 2013 bond.

Project Staffing Implications:

Major Field Support, Contract Administration, Project Management, and GIS Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Replacement	\$210,000
2011		\$3,500,000
2012		
2013		
2014		
2015		\$6,000,000
Project Total		\$9,710,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-08

Name of Project: Barrigada Tank Repair/Replacement

Reference Documents:

Project Description:

This project will replace the 1.0 MG tank that collapsed in 2003. The new tank will be located in the same footprint as the previous tank. This project will include a design analysis for a replacement tank.

Project Justification:

The reduction in storage capacity of the Barrigada reservoirs due to the catastrophic failure of the previous 1.0 MG steel tank has negatively impacted the ability of GWA to effectively supply adequate water source to the villages of Barrigada and Maite.

Financing Options & Grants:

The source of funding for this project will be the Department of Interior grant.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$8,000
2011	Planning/Design/Construction	\$2,000,000
2012		
2013		
2014		
2015		
Project Total		\$2,008,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-09

Name of Project: Leak Detection / Line Replacement

Reference Documents:

Project Description:

This project will perform system wide leak detection, line location and mapping, leak repair and inspection, leak analysis and control, and training and technology transfer. Line location will be performed where GIS and model data are incomplete. Leak detection will be performed on 450 miles of system pipe, including use of acoustical surveying and water audits. Leaks and repairs will be inspected, standard operating procedures reviewed/revised and material inventories developed. GWA personnel will receive training in leak detection methods and equipment. Pressure, surge and frequency analysis will be conducted, and recommendations developed for pipeline replacement, system reconfiguration, and other adjustments needed to control leakage. Data from leak detection will be used to set line replacement priorities with a goal to design and construct the replacement of approximately 10 miles of distribution mains annually depending on availability of funding.

Project Justification:

GWA system consists of hundreds of miles of water distribution mains consisting of numerous different pipe sizes and types. Many of these lines are undersized and/or failing due to improper construction, earthquake damage, and/or material failures. Operating personnel average about 5 distribution main breaks per week. Water losses (unaccounted water) from all sources are >50% of total production.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond, 2013 bond and U.S EPA, Grant.

Project Staffing Implications:

Major Contract Administration, Major Project Management Services, and Major Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Leak Assessment	\$579,000
2011		\$3,077,000
2012		
2013		
2014		\$364,000
2015		
Project Total		\$4,020,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-10

Name of Project: Potable Water System Planning

Reference Documents:

- a) MASTER PLAN, VOLUME 2, CHAPTER 6
- b) GUAM CONSOLIDATED COMMISSION ON UTILITIES RESOLUTION NO. 11

Project Description:

This project will include long term planning, system planning, and environmental planning. Specific applications will include potable water hydraulic modeling and the potable water bubble map. This will be used to update a portion of the Master Plan.

Project Justification:

Long term planning, system planning, and environmental planning is essential for developing capital improvement programs. Potable Water System Planning ensures that a system approach is used in project development which specifies how specific projects fit into the overall planning goals.

In addition, the 2006 Master Plan requires updating every two years by the GUAM CONSOLIDATED COMMISSION ON UTILITIES RESOLUTION NO. 11 - FY2007 RELATIVE TO APPROVING THE GUAM WATERWORKS AUTHORITY MASTER PLAN THAT WILL BE USED AS A ROADMAP FOR MOVING THE GUAM WATERWORKS AUTHORITY FORWARD FOR THE NEXT TWENTY YEARS "The Guam Waterworks Authority is hereby directed to continue refining the Master Plan and every two years from the date of approval of this document to recommend to the Consolidated Commission on Utilities improvements and modifications to the Master Plan and the hydraulic model and to recommend and re-prioritize capital projects resulting from said changes or modifications."

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major modeling services and GIS support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Design Planning	\$200,000
2012		
2013		\$500,000
2014		\$800,000
2015		
Project Total		\$1,500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-11

Name of Project: Implement Ground Water Rule

Reference Documents:

Implementation of the Groundwater Rule GEPA

Project Description:

This project will provide upgrades to wells for the implementation of the Groundwater Rule. This project will install chlorine residual monitors on all GWA wells. The wells will include SCADA equipment to communicate the well chlorine levels to central location.

Project Justification:

The Groundwater Rule requires GWA to install chlorine residual monitors on all GWA wells.

Financing Options & Grants:

This project will be funded from USEPA, Safe Drinking Water and State Revolving Fund (SRF).

Project Staffing Implications:

A control system technician will be required to maintain the monitors and related SCADA equipment.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$2,200,000
2012		
2013		
2014		
2015		
Project Total		\$2,200,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 05-12

Name of Project: Brigade II (Ugum Lift) BPS Upgrade

Reference Documents:

GWA Engineering Division, Potable Water Production Enhancement Plan, June 10, 2010.

Project Description:

A new Brigade II booster pump station is required to fully utilize the surface supply from the south or the Ugum Treatment Plant. A new pump station, located at the Brigade II BPS site, will serve both the Windward Hills Reservoir and the Pulantat Reservoir. To provide this operational flexibility, the new pump station is to be located on the downstream side of Ugum Reservoir and should be able to overcome the pipe head loss plus the elevation difference (139 feet) between the Pulantat Reservoir and the Ugum Reservoir. Approximately 1100 feet of pipe is required in addition to the pump station. Additionally, the Brigade booster pump station and Windward Hills booster pump station will be upgraded to increase reliability and energy savings.

Project Justification:

The new external pressures that affect the current production issue are as follows. GEPA's Water Resources Management Program (WRMP) is responsible for the protection of the aquifer. The Guam aquifer has a fresh water lens that rests on salt water. An early warning indicator of the stress on the fresh water lens is the chloride levels which measure the amount of sea water in the lens. Based on GEPA 2009 Annual Production Well Inspection Report, 13 of GWA's wells were required to decrease production due to the chloride levels; and 16 wells were approaching the chloride limit. One approach to supplementing the water supply due to the decrease in production of these 13 wells is to maximize the use of GWA's surface water and ground water. It is estimated that an increase in production of 2 MGD is needed to offset this loss in production. In June 24, 2008 and December 15, 2009 the Navy notified GWA that GWA adhered to the allocation of 3.5 MGD. In the most recent letter however, GWA's water purchase of 4.1 MGD cannot be continued by the Navy this dry season.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Design Construction	\$1,200,000
2013		
2014		
2015		
Project Total		\$1,200,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 05-13

Name of Project: Deep Well Rehabilitation

Reference Documents:

GWA Engineering Division, Potable Water Production Enhancement Plan, June 10, 2010.

Project Description:

This project will rehabilitate up to 3 wells to increase supply and include the rehabilitation of "down-hard" wells. This project will require a feasibility study to determine the specific approach and cost estimate for each well.

Project Justification:

The new external pressures that affect the current production issue are as follows. GEPA's Water Resources Management Program (WRMP) is responsible for the protection of the aquifer. The Guam aquifer has a fresh water lens that rests on salt water. An early warning indicator of the stress on the fresh water lens is the chloride levels which measure the amount of sea water in the lens. Based on GEPA 2009 Annual Production Well Inspection Report, 13 of GWA's wells were required to decrease production due to the chloride levels; and 16 wells were approaching the chloride limit. One approach to supplementing the water supply due to the decrease in production of these 13 wells is to maximize the use of GWA's surface water and ground water. It is estimated that an increase in production of 2 MGD is needed to offset this loss in production. In June 24, 2008 and December 15, 2009 the Navy notified GWA that GWA adhered to the allocation of 3.5 MGD. In the most recent letter however, GWA's water purchase of 4.1 MGD cannot be continued by the Navy this dry season.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Planning, design, construction	\$548,000
2013		
2014		
2015		
Project Total		\$548,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 05-14

Name of Project: New Deep Wells at Down Hard Well Sites

Reference Documents:

GWA Engineering Division, Potable Water Production Enhancement Plan, June 10, 2010.

Project Description:

This project will provide wells to increase supply and include new source water by drilling new wells adjacent to existing wells. This cost of these new wells will include casing and the transmission line to tie the wells into the system. This project will require a feasibility study to determine the specific approach and cost estimate for each well.

Project Justification:

The new external pressures that affect the current production issue are as follows. GEPA's Water Resources Management Program (WRMP) is responsible for the protection of the aquifer. The Guam aquifer has a fresh water lens that rests on salt water. An early warning indicator of the stress on the fresh water lens is the chloride levels which measure the amount of sea water in the lens. Based on GEPA 2009 Annual Production Well Inspection Report, 13 of GWA's wells were required to decrease production due to the chloride levels; and 16 wells were approaching the chloride limit. One approach to supplementing the water supply due to the decrease in production of these 13 wells is to maximize the use of GWA's surface water and ground water. It is estimated that an increase in production of 2 MGD is needed to offset this loss in production. In June 24, 2008 and December 15, 2009 the Navy notified GWA that GWA adhered to the allocation of 3.5 MGD. In the most recent letter however, GWA's water purchase of 4.1 MGD cannot be continued by the Navy this dry season.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Planning, design, construction	\$3,773,000
2013		
2014		
2015		
Project Total		\$3,773,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-15

Name of Project: Rehabilitation of Asan Springs Ground Reservoir

Reference Documents:

GWA Engineering Division, Potable Water Production Enhancement Plan, June 10, 2010.

Project Description: This project will include the reservoir rehabilitation and treatment and chlorination facilities upgrade.

Project Justification:

The new external pressures that affect the current production issue are as follows. GEPA's Water Resources Management Program (WRMP) is responsible for the protection of the aquifer. The Guam aquifer has a fresh water lens that rests on salt water. An early warning indicator of the stress on the fresh water lens is the chloride levels which measure the amount of sea water in the lens. Based on GEPA 2009 Annual Production Well Inspection Report, 13 of GWA's wells were required to decrease production due to the chloride levels; and 16 wells were approaching the chloride limit. One approach to supplementing the water supply due to the decrease in production of these 13 wells is to maximize the use of GWA's surface water and ground water. It is estimated that an increase in production of 2 MGD is needed to offset this loss in production. In June 24, 2008 and December 15, 2009 the Navy notified GWA that GWA adhered to the allocation of 3.5 MGD. In the most recent letter however, GWA's water purchase of 4.1 MGD cannot be continued by the Navy this dry season.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$900,000
2012		
2013		
2014		
Project Total		\$900,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 05-16

Name of Project: Master Metering

Reference Documents:

a) The Bubble Map and Water Service Area Map.

Project Description:

This project will provide for the design, installation, and materials for water meters to be installed at major GWA facilities and pressure zones to fully account for water consumption. It is anticipated that this will greatly aid in analyzing and forming a more accurate picture related to leak detection studies and reports. The Leak Detection Contractor will make recommendations on key pressure zone locations.

Project Justification:

The project is needed to perform water audits on water service areas (WSA) as required by US EPA. This project will greatly enhance the data from the current leak detection contract.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Design Planning	\$100,000
2012		\$1,500,000
2013		
2014		
2015		
Project Total		\$1,600,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-01

Name of Project: Ugum Water Treatment Plant Intake Modifications

Reference Documents:

- a) Stipulated Order 2006, item 41, Ugum Surface Water Treatment Plant. Due January 5, 2008.
There is \$9,000 in fines to date.
- b) MASTER PLAN, VOLUME 2, TABLE 9-6
- c) *GWA Engineering Division, Potable Water Production Enhancement Plan*, June 10, 2010.

Project Description:

This project includes an alternative analysis and a design concept report to refine the extent and cost of this critical project. This project will improve the intake structure of the Ugum Water Treatment Plant to minimize siltation and provide more reliable raw water supply during low river flow conditions.

Project Justification:

The existing intake is susceptible to siltation and requires frequent maintenance. The Ugum WTP is a major source of water for supplying the Southern Water System.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/construction	\$1,470,000
2012		\$2,200,000
2013		
2014		
2015		
Project Total		\$3,670,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 09-02

Name of Project: Water Wells

Reference Documents:

- a) GWA Needs Assessment for Anticipated Guam Military Buildup 08/2007 and 08/2009 update.
- b) GWA Engineering Division, *Potable Water Production Enhancement Plan*, June 10, 2010.

Project Description:

GWA projects a need to construct approximately 16 new production wells to produce an additional 7 MGD. In addition, the Department of Defense projects a need for approximately 22 new production wells to produce approximately 15 MGD (estimated number of wells is lower based on expected para-basal production). Together with existing well and wells under construction these new demands will push the total withdrawal from the aquifer to greater than 70 MGD. Because this withdrawal rate is nearing the estimated maximum sustainable yield, it is imperative that the site locations and development of these wells are executed with a whole-aquifer perspective rather than based on current property boundaries and well ownership. Therefore, GWA is seeking approval to site and develop wells to meet the total demands of both civilian and military populations as noted above (38 wells @ 22 MGD).

Project Justification:

Military operational water demands as well as demands from personnel and dependents living on base will be satisfied by existing military operated sources and/or by new sources currently under development by the military. Water demands for all population residing in all other areas of Guam will be met by GWA sources. Ultimately, the projected demands can be satisfied through a program of line replacements and leak reduction. However, line replacements cannot be accomplished rapidly enough to meet the increased demands that are expected.

Financing Options & Grants:

The source of funding for this project will be the 2013 bond, System Development Charge, and U.S.EPA Grant.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$2,356,000
2012	Construction	\$1,000,000
2013		
2014		\$9,500,000
2015		\$5,500,000
Project Total		\$18,356,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP PW 09-03

Name of Project: Water Distribution System Pipe Replacement

Reference Documents:

- a) MASTER PLAN, VOLUME 2, TABLE 9-7
- b) GWA Engineering Division, Potable Water Production Enhancement Plan, June 10, 2010.

Project Description:

In addition to specific pipe replacement projects identified through hydraulic modeling, there is an ongoing need to create funding reserves for pipe replacement to address leak, failure and age issues. The basis for this reserve is to replace 13,500 linear feet of pipe per year through 2015 and 2,000 feet of pipe replacement per year thereafter.

Project Justification:

Specific replacement areas are not identified at this time, but an allocation of resources is reserved in the CIP for accounting purposes and to ensure funds are available.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond, 2013 bond, U.S.EPA Grant.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Major Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$1,848,000
2012	Construction	\$5,384,000
2013	Construction	\$3,500,000
2014	Construction	\$5,698,000
2015		\$5,520,000
Project Total		\$21,950,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-04

Name of Project: Pressure Zone Realignment/Development 2005 Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-12

Project Description:

The hydraulic modeling of the water system identified areas with inadequate service pressures and flows. Installation of pressure regulating valve and pressure sustaining valve stations is required at strategic locations to facilitate the development of defined pressure zones, and improve circulation of flow from a higher pressure zone to a lower pressure zone.

Project Justification:

Pressure zone changes needed to improve flow circulation and defined pressure zones.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Major Modeling Support are required. The modeling support to achieve this project will be extensive.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$1,150,000
2012	Construction	\$2,400,000
2013	Construction	
2014		
2015		\$1,400,000
Project Total		\$4,950,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-05

Name of Project: Northern System Water Distribution System 2005 Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-11

Project Description:

The 2005 hydraulic model for GWA's Northern Water System identified deficiencies in pumping capacity and pipe size to provide adequate fire flow and pressure, and reduce high velocities and friction losses.

Project Justification:

This project's primary justification is to improve fire flow and pressure in the respective areas.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Planning/Design/Construction	\$2,425,000
2013	Construction	\$300,000
2014	Construction	\$875,000
2015		\$500,000
Project Total		\$4,100,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-06

Name of Project: Central Water Distribution System 2005 Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-10

Project Description:

The 2005 hydraulic model for GWA's Central Water System identified deficiencies in pumping capacity and pipe size to provide adequate fire flow and pressure, and reduce high velocities and friction losses.

Project Justification:

This project's primary justification is to improve fire flow and pressure in the respective areas.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, Construction Management Services, GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$600,000
2012	Construction	\$300,000
2013	Construction	\$600,000
2014		
2015		
Project Total		\$1,500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-07

Name of Project: Southern Water Distribution System 2005 Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-9

Project Description:

The 2005 hydraulic model for GWA's Southern Water System identified deficiencies in water pipe sizes required to provide adequate fire flow.

Project Justification:

This project's primary justification is to improve fire flow and pressure in the respective areas.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, Construction Management Services, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$500,000
2012	Construction	\$650,000
2013	Construction	\$1,300,000
2014	Construction	
2015		
Project Total		\$2,450,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-08

Name of Project: Mechanical/Electrical Equipment Replacement

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-8

Project Description:

This project will create an equipment reserve for routine mechanical/electrical equipment replacement due to age, capacity, or failure. This reserve includes well pumps, booster pumps, valves, emergency generators and other items associated with the Northern, Central and Southern Water Systems.

Project Justification:

Sufficient funds must be reserved to ensure water system mechanical and electrical equipment is replaced in a timely manner.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$500,000
2012	Construction	\$430,000
2013	Construction	\$860,000
2014	Construction	
2015		
Project Total		\$1,790,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-09

Name of Project: Water Reservoir Internal/External Corrosion Assessment Program

Reference Documents:

- a) MASTER PLAN, VOLUME 2, TABLE 9-2

Project Description:

This project will develop and implement a corrosion assessment program for all steel water reservoirs to determine the extent of internal and external reservoir corrosion and necessary course of action to rehabilitate or replace the affected reservoirs.

Project Justification:

The failure of the Barrigada Water Reservoir #1 in June 2005 demonstrated the urgent need to internally inspect and carry out a full condition assessment of all steel reservoirs to determine the degree of corrosion damage and establish remedial action or reservoir replacement as appropriate.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management, and Construction Inspection are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Assessment/Planning	\$500,000
2012		
2013		
2014		
2015		
Project Total		\$500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-10

Name of Project: Water Reservoir Internal/External Corrosion Rehabilitation Program

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-3

Project Description:

This project will program the rehabilitation of designated reservoirs over a four-year period as a phased project based on the results of the corrosion assessment program for all steel water reservoirs.

Project Justification:

The failure of the Barrigada Water Reservoir #1 in June 2005 demonstrated the urgent need to internally inspect and carryout a full condition assessment of all steel reservoirs to determine the degree of corrosion damage and establish remedial action or reservoir replacement as appropriate.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Assessment/Planning/Construction	\$800,000
2012	Construction	\$800,000
2013	Construction	\$800,000
2014	Construction	\$400,000
2015		\$400,000
Project Total		\$3,200,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 09-11

Name of Project: Water System Reservoirs 2005 Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-14 & 15

Project Description:

This project will construct additional reservoirs that address deficiencies in water storage capacity.

Project Justification:

The 2005 hydraulic model for GWA's three water systems identified deficiencies in reservoir capacity. This project will provide adequate capacity and pressure for fire and customer supply.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Assessment/Planning/Construction	\$3,697,000
2012	Construction	\$8,000,000
2013	Construction	\$5,000,000
2014	Construction	\$3,000,000
2015	Construction	\$12,503,000
Project Total		\$32,200,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 11-01

Name of Project: Distribution System Upgrades

Reference Documents:

Project Description:

Waterlines from the 2009 Leak Detection Program distribution system upgrades will be identified that are in conformance with the Master Plan but are not scheduled with the current time horizon but need to be repaired sooner.

Project Justification:

Water Distribution System Pipe: GWA's system consists of hundreds of miles of water distribution mains consisting of various pipe sizes and types. Many of these lines are undersized and/or failing due to improper construction, earthquake damage, and/or material failures. Additionally, pressure zone changes are needed to improve flow circulation and define pressure zones.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Assessment/Planning/Construction	\$1,500,000
2013	Construction	\$1,682,000
2014	Construction	\$618,000
2015		
Project Total		\$3,800,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP PW 11-02

Name of Project: Ugum Water Treatment Plant Reservoir Replacement

Reference Documents:

Project Description:

This project will provide a 2.0 million gallon finished water reservoir at the Ugum Water Treatment Plant. This reservoir is the sole source of finished water for most of the Southern Water System. Failure of this reservoir would result in a significant hardship on customers in the system. The new reservoir would allow the existing reservoir to be taken off-line and refurbished.

Project Justification:

To provide redundancy in storage at the treatment plant that will allow for periodic maintenance. The existing reservoir is damaged, but cannot be taken out-of-service for repair because there is no back-up.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$28,000
2011		
2012	Assessment/Planning/Construction	\$1,322,000
2013	Construction	\$2,350,000
2014		
2015		
Project Total		\$3,700,000

GWA Capital Improvement Plan

Project Sheet FY 2011-2015

Project Number: CIP WW 05-01

Name of Project: Old Agat Wastewater Collection (Phase II)

Reference Documents:

CIP WW 09-03 Old Agat Wastewater Collection (Phase III)

Project Description:

This project will replace a portion of 32,800 LF (6.21 miles) of existing wastewater collection line including manholes and sewer service laterals in the Agat collection system. The replacement sewer lines will be connected to the mainline along Route 2A at Tomas Mesa Street.

Project Justification:

A major collection system rehabilitation program is needed in this area due to capacity-related sewer back-ups, overflows, and the age and material of the pipe.

Financing Options & Grants:

The source of funding for this project will be the U.S. EPA Grant.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management and GIS services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Construction	\$2,200,000
2011		\$1,200,000
2012		
2013		
2014		
2015		
Project Total		\$3,400,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 05-02

Name of Project: Collection Line Upgrade/ Collection System Upgrades

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-23

Project Description:

Annual recurring design and construction project to replace/rehabilitate collection systems. This would focus on the worst condition pipes not already scheduled for hydraulic related rehab or replacement. The Water Resources Master Plan prioritized sewer rehabilitation projects and recommended an annual rehabilitation budget. The Master Plan priority list undergoes continual updates as GWA Operations utilizes Closed Circuit TV to inspect the sewers and reprioritize rehabilitation projects. Ongoing collection line inspection reports are used to develop and update the priority rehabilitation list.

Project Justification:

An annual collection system rehabilitation program prevents condition (age, material, etc.) and capacity related sewer back-ups and overflows.

Financing Options & Grants:

The main source of funding for this project is the Department of Defense.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$51,638
2011		
2012		
2013	Planning/Design/Construction	\$1,600,000
2014	Construction	\$1,700,000
2015	Construction	\$500,000
Project Total		\$3,851,638

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 05-03

Name of Project: NDWWTP Diffuser Installation

Reference Documents:

- a) Stipulated Order 2006, Item 36

Project Description:

The USEPA-approved design for the Northern District Wastewater Treatment Plant (NDWWTP) outfall extension project included a diffuser to promote initial mixing at the discharge point. The design parameters for the diffuser, as illustrated in the Basis for Design document, were established in order to meet permit requirements at the boundary of a zone of initial dilution. Because of the costs which have exceeded the amount of funding GWA has available, the uncertainty regarding the regulatory advantage of utilizing a diffuser and the likelihood that the diffuser will be obsolete in the next two years because of the Department of Defense (DoD) build-up and possible expansion of NDWWTP, GWA postponed diffuser installation until the next bond issuance. However, having a properly designed and installed diffuser is critical for environmental protection and needs to be a priority.

Project Justification:

The outfall was designed to be used with the diffuser, and therefore having a properly designed diffuser for mixing is critical to environmental protection and compliance.

Financing Options & Grants:

The main source of funding for this project will be the Department of Defense.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Design/Construction	\$3,000,000
2012		
2013		
2014		
2015		
Project Total		\$3,000,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP WW 05-04

Name of Project: Wastewater System Planning

Reference Documents:

- a) MASTER PLAN, VOLUME 3, CHAPTER 4.7.3
- b) GUAM CONSOLIDATED COMMISSION ON UTILITIES RESOLUTION NO. 11-FY2007

Project Description:

Wastewater System Planning will include long term planning, system planning, and environmental planning. Specific application would include wastewater hydraulic modeling and the wastewater skeletal basin map. This will be used to update a portion of the Master Plan.

Project Justification:

Long term planning, system planning, and environmental planning is essential for developing capital improvement programs. Wastewater System Planning ensures that a system approach is used in project development.

In addition, the 2006 Master Plan requires updating every two years by the GUAM CONSOLIDATED COMMISSION ON UTILITIES RESOLUTION NO. 11 - FY2007 RELATIVE TO APPROVING THE GUAM WATERWORKS AUTHORITY MASTER PLAN THAT WILL BE USED AS A ROADMAP FOR MOVING THE GUAM WATERWORKS AUTHORITY FORWARD FOR THE NEXT TWENTY YEARS "The Guam Waterworks Authority is hereby directed to continue refining the Master Plan and every two years from the date of approval of this document to recommend to the Consolidated Commission on Utilities improvements and modifications to the Master Plan and the hydraulic model and to recommend and re-prioritize capital projects resulting from said changes or modifications."

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Major modeling services and GIS support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Planning/Design	\$500,000
2011		\$1,500,00
2012		
2013		
2014		
2015		
Project Total		\$2,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 05-05

Name of Project: Wastewater Vehicles

Reference Documents:

Project Description:

Approval is requested for \$235k to replace 8 of existing vehicle fleet with: 4 pickups fitted with tool boxes; 3 maintenance vans; and 1 ton pickups fitted with racks, tool boxes.

Project Justification:

The operations and maintenance team have a critical need for safe and reliable vehicles. Many of the existing vehicles are in an extremely poor and unsafe condition. Due to their unsafe condition, a number of vehicles have been taken off the road reducing efficiency and effectiveness of the team. To maintain minimum levels of coverage, 3 vehicles have been leased. This is not a cost effective solution.

Due to the age of the vehicles (11 of the 31 vehicles are over 10 years old); there are an increasing number of breakdowns which result in lost time of high value employees. This often leads to delays in essential operator input or equipment repairs.

On a number of occasions repair bills have been presented which are greater than the value of the vehicle.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
2011		\$235,000
2012		
2013		
2014		
2015		
Project Total		\$235,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 05-06

Name of Project: Wastewater Pump Station Upgrades

Reference Documents:

Project Description:

This project will replace aging pumps at Fujita, Yigo, Chalan Pago, PS 14, Harmon and Tipalao SPS. The pumps at these key sites failed in the first part of 2009 and are beyond economic repair.

Project Justification:

The above sites operate either without standby pumps or inadequate standby pumps. These sites have historically experienced a number of sewage overflows as a result of these conditions. For example, Fujita pump station failures have caused the Hyatt Regency Hotel to flood causing significant issues for the hotel.

Due to the public health risks associated with sewage overflows and the critical operating regimes at these sites, it is highly recommended that funding approval be given to replace pumps at these key sites.

Financing Options & Grants:

The main source of funding for this project is the Department of Defense.

Project Staffing Implications:

Project Management Services and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$225,000
2012		
2013		
2014		
2015		
Project Total		\$225,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 05-07

Name of Project: NDWWTP - Chlorine Tanks

Reference Documents:

- a) Performance Management Contract, CIP / PIP Review June 2007

Project Description:

This project will safely remove and dispose hazardous materials stored in eleven (11) one ton chlorine cylinders of indeterminate age located at the Northern District Wastewater Treatment Plant. The amount of chlorine in the tanks is unknown.

Project Justification:

These tanks represent a significant public health and safety threat and need to be removed as soon as possible, in a manner that protects the plant and surrounding community.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$250,000
2012		
2013		
2014		
2015		
Project Total		\$250,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: WW CIP 05-08

Name of Project: Umatac-Merizo STP Improvements

Reference Documents:

Project Description:

Installation of high efficiency motors, high efficiency aerator, new valves and dredging of the lagoon.

Project Justification:

The lagoon has continually been filling with sludge, significantly reducing capacity, increasing overflows from the system, and increasing the risk of NPDES violations. The project will also improve the overall energy efficiency of the plant.

Financing Options & Grants:

This project is funded through USEPA ARRA Grant in the amount of \$535,000.

Project Staffing Implications:

Contract Administration, Project Management, and Construction Inspection are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$535,000
2012		
2013		
2014		
2015		
Project Total		\$535,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-01

Name of Project: LS Priority 1 Upgrades

Reference Documents:

- a) Performance Management Contract, CIP / PIP Review June 2007

Project Description:

Specific rehabilitation and repair capital projects are needed for the sewage pump stations. These projects include: Health and Safety (e.g. overhead crane repair and fall protection barriers), Environmental Protection and Compliance (e.g. high level alarm systems), Energy Optimization Programs (e.g. upgrading electrical controls and motors), and economically beneficial Asset Replacement (e.g. replacement of a pump for \$9,000 rather than repair it for \$7,600).

Project Justification:

Sewage pump stations require ongoing capital upkeep in order to maintain safety, prevent sewer overflows, maintain environmental compliance and optimize energy usage.

Financing Options & Grants:

The main source of funding for this project is the Department of Defense.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$2,000,000
2012		
2013	Construction	\$8,500,000
2014	Construction	\$8,900,000
2015		
Project Total		\$19,400,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-02

Name of Project: Moratorium

Reference Documents:

- a) Central Guam Sewer Improvements Functional Design Report, January 2009
- b) MASTER PLAN, VOLUME 3, TABLE 9-7, 8, 9, 10, 28, 29, 43, 44

Project Description:

The Moratorium project is a collection of specific wastewater projects within the Tamuning and Agana villages. These projects include upgrades to the Mamajanao, Route 16, and Agana Main Pump Stations, construction of a new pump station in Tamuning, and installation of sewer pipe from the new Chaot pump station to the Agana Wastewater Treatment Plant.

Project Justification:

The sewer system in the Central Guam catchment along Marine Corp. Drive and Route 4 close to Agana Bay is stressed. The primary sewers in these locations experience periodic overflows with 2008 flows and by 2025 the system could be completely overwhelmed. This problem is exacerbated by the Mamajanao Sewage Pump Station, which under certain operating conditions is unable to cope with the influent flows without surcharging and locally flooding the downstream system.

Financing Options & Grants:

The source of funding for this project will be Short-Term Loan and Department of Defense.

Project Staffing Implications:

Major Contract Administration, Major Project Management, GIS Support, and Modeling Support, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
2011	Construction	\$5,000,000
2012		
2013		
2014		
2015		
Project Total		\$5,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-03

Name of Project: Old Agat Collection Continuation (Phase III)

Reference Documents:

CIP WW 05-01, Old Agat Wastewater Collection (Phase II)

Project Description:

This project will replace a portion of about 32,800 LF (6.21 miles) of existing wastewater collection line including manholes and sewer service laterals in the Agat collection system. The replacement sewer lines will be connected to the mainline along Route 2A at the Tomas Mesa Street.

Project Justification:

Sewers are in extremely poor condition and are a significant source of rainwater inflow and infiltration (I&I). Excessive I&I causes the Agat Wastewater Treatment Plant to exceed its design capacity, exceed permit limits, requires occasional bypasses, and leads to sewer back-ups and overflows. Sewers currently run behind houses and not in utility easements and cannot be accessed for maintenance.

Financing Options & Grants:

The source of funding for this project will be the U.S. EPA grant.

Project Staffing Implications:

Contract Administration, Project Management Services, Construction Management Services, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$1,500,000
2011		\$1,200,000
2012		
2013		
2014		
2015		
Project Total		\$2,700,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-04

Name of Project: Manhole Frame Seal Repair

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-20 & 21

Project Description:

Repair the manhole cover frame to barrel/cone seal at multiple manhole locations identified by manhole inspections and rehabilitate manholes with severe infiltration.

Project Justification:

The project will reduce the potential for inflow to the collection system during wet weather events, which will subsequently prevent system overloading and avoid backups and overflows.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Project Management and Construction Inspection are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Planning/Design/Construction	\$84,000
2011		
2012		
2013		
2014		
2015		
Project Total		\$84,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-05

Name of Project: Agat Manhole Rehabilitation

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-21

Project Description:

This project will rehabilitate four (4) manholes that were identified to have active infiltration by manhole inspection.

Project Justification:

This project will reduce infiltration to the collection system during wet and dry weather events.

Financing Options & Grants:

The main source of funding for this project will be the 2011 Bond.

Project Staffing Implications:

Project Management and Construction Inspection are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Planning/Design/Construction	\$55,000
2011		
2012		
2013		
2014		
2015		
Project Total		\$55,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-06

Name of Project: Wastewater Collection System Replacement/Rehabilitation Program

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-23

Project Description:

Annual recurring design and construction project to replace/rehabilitate 3/4 of the total collection system (~8,600 feet) per year. This would focus on the worst condition pipes not already scheduled for hydraulic related rehab or replacement. The cost is estimated at \$240 per foot which assumes an average pipe diameter of 10 inches and does not include the cost of potential traffic control.

Project Justification:

Replacement/rehabilitation program will upgrade sewer collection system as a proactive activity to mitigate catastrophic system failure.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Major Construction Management, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Planning/Design/Construction	\$250,000
2011	Construction	\$250,000
2012	Construction	\$1,750,000
2013	Construction	\$1,000,000
2014		
2015		
Project Total		\$3,250,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-07

Name of Project: Tumon Bay Sewer Upgrades

Reference Documents:

- a) Final Tumon Wastewater Study, January 2008

Project Description:

There are several major sewer project upgrades identified in the reference document that will increase the collection and pumping capacity for GWA. The continued growth in Tumon Bay has raised concerns with GWA regarding the current sewer capacity and the lack of system redundancy.

Project Justification:

Inadequate sewer capacity in Tumon Bay, Guam's premier tourist district and a Marine Preserve, leads to current overflows; future development will exacerbate this condition, potentially leading to a failure of the system.

Financing Options & Grants

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity	Planning/Design/Construction	
2011		
2012		\$100,000
2013		
2014		
2015		
Project Total		\$100,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-08

Name of Project: Facilities Plan/Design for Baza Gardens STP Replacement

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-26
- b) Wastewater Facilities Plan, Baza Gardens WWTP, August 2008
- c) CIP WW 11-03 Baza Gardens STP Replacement
- d) Guam Environmental Protection Agency Requirements meeting minutes, December 19, 2007 and letter, May 13, 2008.

Project Description:

Planning and design for new wastewater treatment facilities to reliably meet secondary treatment limits. Due to strict effluent limits imposed by the stream discharge and difficulty in operating complex treatment systems to reliably meet these limits, an alternative means of disposal should be considered in the Facility Plan. Facility Plan process recommendations will be based on the recommended alternative means of disposal. The new facilities will incorporate provisions for redundancy to improve reliability and facilitate operations and maintenance activities. Design and test the concept of utilization of Underground Injection Wells (UIC) for effluent discharge and design a replacement for the existing wastewater treatment plant with a new Membrane Bioreactor plant at the same location.

Project Justification:

Existing facilities lack redundancy and reliability, are difficult to operate, and require significant repair. Existing disposal requirements cannot be achieved, so a different effluent disposal system must be identified. The current secondary treatment plant cannot meet the stringent nutrient limits in the receiving stream, and the facility has outlived its design life and has severe operational challenges. A new plant is required that discharges to an Underground Injection Well (pursuant to Guam Environmental Protection Agency requirements).

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and U.S. EPA Grant.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		\$2,575,000
2013		
2014		
2015		
Project Total		\$2,575,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-09

Name of Project: Facilities Plan/Design for the Northern District STP Bio-solids

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-32
- b) CIP, WW CIP 11-07, Northern District STP Expansion - Biosolids

Project Description:

Planning and design for repairs to the biosolids stabilization facilities (digesters) and dewatering system (centrifuges) for present and future flows. Facility Plan should include an evaluation of creating a centralized biosolids treatment and processing facility at this location.

Project Justification:

Existing biosolids treatment facilities were damaged by the typhoon and have been out of service. Centralized processing of biosolids from smaller STPs may be more reliable and efficient than the current decentralized approach. The capacity of the existing solids treatment facilities should be adequate to process the solids from GWA's other treatment plants, although lacks redundancy.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design	\$500,000
2012		
2013		
2014		
2015		
Project Total		\$500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-10

Name of Project: Facilities Plan/Design for Agat-Santa Rita STP Replacement

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-24

Project Description:

Planning and design for new wastewater treatment facilities at GWA's Tipalao site to meet existing and future flow capacity and reliably achieve regulatory compliance. The new facilities will incorporate provisions for redundancy to improve reliability and facilitate operations and maintenance activities.

Project Justification:

Existing facilities do not have sufficient capacity for current and future flow projections. Existing facilities lack redundancy and reliability, are difficult to operate, and require significant repair.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and U.S. EPA grant.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$600,000
2012		\$1,624,000
2013		
2014		
2015		
Project Total		\$2,224,000

**GWA Capital Improvements Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 09-11

Name of Project: WWTP Priority 1 Upgrades

Reference Documents:

a) Performance Management Contract, CIP / PIP Review June 2007

Project Description:

Specific rehabilitation and repair capital projects are needed for the sewage pump stations. These include projects: Health and Safety (e.g. overhead crane repair and fall protection barriers), Environmental Protection and Compliance (e.g. grit removal), Energy Optimization Programs (e.g. upgrading electrical controls and motors), and economically beneficial Asset Replacement (e.g. replacement of a pump for \$9000 rather than repair it for \$7600).

Project Justification:

Aging infrastructure leads to environmental impacts, non-compliance, inefficiencies, and safety problems that must be addressed on an annualized basis.

Financing Options & Grants:

The source of funding for this project will be the U.S.EPA grant and System Development Charge.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013		
2014	Construction	\$6,751,000
2015		
Project Total		\$6,751,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-01

Name of Project: Priority 1 Sewer Upgrades – Agat District

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-11

Project Description:

The Master Plan defined 1720 feet of sewer as priority 1 for upgrade to avoid overflows as population growth occurs.

Project Justification:

This project's primary justification is avoidance of overflows. Inadequate sewers for future growth will result in sewage back-ups and overflows.

Financing Options & Grants:

The source of funding for this project will be the U.S.EPA grant.

Project Staffing Implications:

Contract Administration, Project Management Services, Construction Management Services, Major GIS Support, and Modeling Support are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013		
2014	Planning/Design/Construction	\$2,500,000
2015		
Project Total		\$2,500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-02

Name of Project: Priority 1 Sewer Upgrades – Baza Garden District

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-13

Project Description:

1,600 feet of sewage lines have been assigned a Priority 1 ranking in the Master Plan for improvement in the Baza Gardens STP service area to respond to growth in the connected population. This also includes the sewers in the area of the Talofoto pump station service area that have currently unconnected sewers; these sewers were installed with gravity lines and force mains, but without pumps and those projects must be completed.

Project Justification:

This project's primary justification is avoidance of overflows. Inadequate sewers for future growth will result in sewage back-ups and overflows.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management Services, Major GIS Support, Modeling Support and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$650,000
2012		
2013		
2014		
2015		
Project Total		\$650,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-03

Name of Project: Baza Gardens STP Replacement

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-26 & 27

Project Description:

Construction of new wastewater treatment facilities that will meet secondary treatment limits. Due to strict effluent limits imposed by the stream discharge and difficulty in operating complex treatment systems to reliably meet these limits, an alternative means of disposal should be considered in the Facility Plan. Facility Plan process recommendations will be based on the recommended alternative means of disposal. The new facilities will incorporate provisions for redundancy to improve reliability and facilitate operations and maintenance activities at the existing facility.

Project Justification:

Existing facilities lack redundancy and reliability, are difficult to operate, and require significant repair. Existing disposal requirements cannot be achieved, so a different effluent disposal system must be identified.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond, 2013 bond and System Development Charge.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Construction	
2013	Construction	\$3,567,000
2014	Construction	\$6,267,000
2015		\$12,078,000
Project Total		\$21,912,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: WW CIP 11-04

Name of Project: Facilities Plan/Design for the Umatac-Merizo STP Improvements

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-36

Project Description:

Phase 1 of this project is a facilities plan; phase 2 is design. Planning and design for a new mechanically cleaned bar screen facilities to improve reliability and facilitate operations and maintenance requirements.

Project Justification:

Mechanically cleaned bar screens will improve process performance and reduce O&M requirements.

Financing Options & Grants

The source of funding for this project will be the 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management, and Construction Inspection are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013		
2014	Planning/Design	
2015		\$140,000
Project Total		\$140,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-05

Name of Project: Facilities Plan for Hagatna STP Improvements & Effluent WWPS

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-28
- b) CIP 11-07 Hagatna STP Improvements and Effluent WWPS
- c) Stipulated Order 2006, Item 35

Project Description:

Planning and design for wastewater treatment plant improvements. The following improvements should be considered: Based on current and future flow projections, at least one additional primary clarifier of similar size is required to meet current and future wastewater capacity and redundancy requirements. New head works equipment (including mechanically cleaned screens and grit removal) is recommended to improve process performance, reduce wear on downstream equipment, and improve reliability. A new effluent pump station is required for the disposal of future flows at high tide conditions.

Project Justification:

Existing facilities lack redundancy to reliably treat existing and projected future flows. The Upstream screening facilities at the influent pump station are not functional and beyond repair. Relocating the preliminary treatment equipment to the STP will enhance operations and maintenance of the screens. Grit removal will reduce the amount of grit that gets into the clarifier and digester, improving performance and reducing O&M requirements.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Planning/Design	\$1,900,000
2014		
2015		
Project Total		\$1,900,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-06

Name of Project: Hagatna STP Improvements and Effluent WWPS

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-29

Project Description:

Provide a new primary clarifier to meet current and future wastewater capacity and redundancy requirements. Provide screenings and grit removal for wastewater treatment plant improvements. The new head-works equipment will improve performance, reduce wear on equipment, and improve reliability. The new equipment includes screenings, grit removal and effluent WWPS sized for current and future (Year 2015 projected flow).

Project Justification:

Existing facilities lack redundancy to reliably treat existing and projected future flows. The upstream screening facilities at the Hagatna influent pump station are not functional and beyond repair. Relocating equipment at the STP will enhance operations and maintenance of the screens. Reducing the amount of grit that gets into the clarifier and digester will improve performance and reduce O&M requirements. Effluent WWPS required to convey effluent to outfall during high flow and tide periods.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Construction	\$2,000,000
2014		
2015		
Project Total		\$2,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-07

Name of Project: Northern District STP Expansion - Biosolids

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-33

Project Description:

The project includes construction of repairs to the biosolids stabilization facilities (digesters) and dewatering system (centrifuges) for present and future flows. Design will be based on Facilities Plan recommendations. Master Plan construction budget is based on repairs to existing anaerobic digesters, construction of one additional digester tank to provide redundancy and new centrifuge facilities to serve as a centralized facility for treating GWA biosolids. Project assumed to be built in two phases.

Project Justification:

Existing biosolids treatment facilities experienced typhoon damage and have been out of service. The centralized processing of biosolids from smaller STPs may be more reliable and efficient than the current decentralized approach. The capacity of the existing solids treatment facilities should be adequate to process the solids from GWA's other treatment plants, although lacks redundancy.

Financing Options & Grants:

The main source of funding for this project will be Department of Defense.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Construction	\$2,500,000
2013	Construction	\$2,500,000
2014		
2015		
Project Total		\$5,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP WW 11-08

Name of Project: Agat/Santa Rita STP Replacement

Reference Documents:

Project Description:

Construction of new wastewater treatment facilities that will meet secondary treatment limits. The new facilities will incorporate provisions for redundancy to improve reliability and facilitate operations and maintenance activities at the existing facility.

Project Justification:

Existing facilities lack redundancy and reliability, are difficult to operate, and require significant repair.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond, 2013 bond and U.S. EPA grant.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Construction	\$14,289,000
2014		
2015		
Project Total		\$14,289,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 05-01

Name of Project: Well Electrical Protection

Reference Documents:

Project Description:

Variable frequency drives (VFD) are being considered to reduce the voltage imbalance in the power supply to well pumps (pumps designed for 1% imbalance – supply standard is 3% imbalance). Two pilot installations have been made at wells to gather data that can be used to develop a standard installation design and evaluate the effectiveness of the VFDs. On October 9, 2007, GWA issued an Invitation for Bid to install VFDs to provide adequate and effective electric motor protection at 20 priority deep well sites. It includes installation of magnetic flow meters and pressure transmitters for future application of variable speed motor operation.

Project Justification:

GWA utilizes 100 wells to produce approximately 80% of the water consumed on the island. These wells experience an unusually high rate of failure. Many of the failures are due to inadequate or non-existent protections incorporated into the motor controls. This project will develop a standard design for electrical motor controls and install the new controls at critical well sites.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond and 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management, Construction Inspection, and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$66,000
2011		\$134,000
2012		
2013		
2014		
2015		
Project Total		\$200,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 05-02

Name of Project: SCADA Pilot Project

Reference Documents:

Project Description:

This pilot project will procure communication services and install field instrumentation and a Human-Machine Interface (HMI) to support supervisory control and data acquisition (SCADA) of selected water and wastewater facilities. For this pilot GWA will only make functional real time data acquisition for status monitoring and alarming.

Project Justification:

This pilot project is to identify and evaluate proposed solutions and gather information that will be used to develop design standards for the water and wastewater SCADA system.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Project Management, Construction Inspection and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$300,000
2012		
2013		
2014		
2015		
Project Total		\$300,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-01

Name of Project: Wastewater Pumping Station Electrical Upgrade

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-43

Project Description:

This project will upgrade and standardize the electrical control system at the wastewater pumping stations as recommended in the GWA Master Plan Report. An initial assessment using a standard checklist will be conducted. Project scope will include the reconnection of the electrical service to a grounded WYE system involve replacement of the electrical meter and service conductors. Transient voltage surge suppression will also be installed at the station main service. The level control system will be standardized with a level transducer to provide level indication and communication with the SCADA unit. The back-up will be a float located out of the wet well. Also included are dry well level sensor alarms that are connected to SCADA, where applicable. The motor starters will be replaced with electronic soft start type to reduce mechanical wear.

Project Justification:

It is necessary to improve the electrical reliability at each wastewater pump station and minimize overflows by implementing the recommendations of the GWA Master Plan. Stations that are critical to operations are priority and will be completed first.

Financing Options & Grants:

The source of funding for this project will be the 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Construction Management, and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Construction	\$614,000
2014		
2015		
Project Total		\$614,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-02

Name of Project: Electrical Upgrade - Water Wells

Reference Documents:

- a) MASTER PLAN, VOLUME 2, TABLE 9-25

Project Description:

This project will upgrade the electrical system at each of the water wells as recommended in the Electrical Assessment of the GWA Master Plan. First, a standard electrical checklist and guideline will be developed followed by an assessment of the electrical system at each station. Goals are to change the transformer secondary connection and surge suppression, replace the service conductors, correct the voltage unbalance, prevent water conductor entry, replace the meter socket, install transient voltage surge suppression, install electronic motor protection, install electronic motor starter, install power factor correction equipment, integrate voltage unbalance relays in the auto transfer switch control system, interlock the chlorination controls with the well controls, and interlock with well flush controls.

Project Justification:

This project will improve the electrical reliability at each of the water pumping stations by implementing the recommendations of the GWA Master Plan. Stations that are critical to operations and require high maintenance are priority and will be completed first.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Construction Management, and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Construction	\$500,000
2012	Construction	\$500,000
2013	Construction	\$2,000,000
2014		\$500,000
2015		
Project Total		\$3,500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-03

Name of Project: Electrical Upgrade - Water Booster Pump Stations (Pago Bay, Brigade, Windward Hills)

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-22

Project Description:

This project is for the electrical upgrade at the Pago Bay, Brigade, and Windward Hills water booster stations by replacing the existing motors with premium efficiency motors, improve the system grounding, install transient voltage surge suppression equipment (TVSS), replace the motor control center, replace instrumentation controls, and add power factor correction. This project includes a detailed engineering assessment and preparation of design engineering plans.

Project Justification:

The original distribution boards and motor controls have reached their useful lives, have signs of corrosion, and are missing parts. Improvements in motor efficiency and control devices reduce energy consumption costs. The voltage and transient surge suppressions reduce voltage surges within the facility while power factor correction help improve voltage stability.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Construction Management, and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Construction	\$650,000
2014		
2015		
Project Total		\$650,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-04

Name of Project: Electrical Upgrade -Water Booster Pump Stations (Gayinero, Santa Rosa, Santa Rita Springs and Truman)

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-23

Project Description:

This project is for the electrical upgrade at the water booster stations by replacing the existing motors with premium efficiency motors, improve the system grounding, installation of transient voltage surge suppression equipment (TVSS), replace the motor control center and main distribution board, replace the instrumentation controls, and add power factor correction, where applicable. Included is a detailed engineering assessment and preparation of design engineering plans and specifications.

Project Justification:

The original distribution board and motor controls have reached their useful lives, have signs of corrosion, and are missing parts. Improvements in motor efficiency reduce energy costs. The application of transient surge suppressions and power factor capacitors reduce voltage surges and improve stability.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Construction Management, and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Planning/Design/Construction	\$350,000
2014		
2015		
Project Total		\$350,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-05

Name of Project: Electrical Upgrade - Other Water Booster Pump Stations

Reference Documents:

a) MASTER PLAN, VOLUME 2, TABLE 9-24

Project Description:

This project is for the electrical upgrade at the other water booster stations such as Yigo Elevated Tank, Pale Kieran, etc. Project scope includes: replacing the existing motors with premium efficiency motors, improve system grounding, install transient voltage surge suppression equipment (TVSS), replace the motor control center and main distribution board, replace instrumentation controls, and add power factor correction, where applicable.

Project Justification:

Several stations' original distribution board and motor controls have reached their useful life, have signs of corrosion, and are missing parts. Improvements in motor efficiency reduce energy costs. The voltage and transient surge suppressions and power factor correction also reduce voltage surges and improve voltage stability.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, Construction Management and Technical Support after completion are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013	Planning/Design/Construction	\$250,000
2014		
2015		
Project Total		\$250,000

GWA Capital Improvement Plan Project Sheet FY 2011-2015

Project Number: CIP EE 09-06

Name of Project: SCADA Improvements – Phase 1

Reference Documents:

- a) MASTER PLAN, VOLUME 3, TABLE 9-44
- b) *GWA Engineering Division, Potable Water Production Enhancement Plan*, June 10, 2010.

Project Description:

Phase 1 of this project involves the development of a SCADA (Supervisory Control and Data Acquisition) Master Plan, design and construction standards and installation of a SCADA Master Station and SCADA system at selected critical water wells and critical wastewater pumping stations along with the critical chlorination system wells. The SCADA system will convey SCADA data and status information to a GWA central dispatch center where digital text messaging would be directed to key personnel.

Project Justification:

GWA's present method of monitoring the water and wastewater pumping stations is through the use of "rover" personnel to visit each site. Often times this does not produce timely notification of an outage or overflow condition. A GWA SCADA system would allow 24/7 monitoring and provide timely alarm and status information to operations personnel. This will greatly enhance the effective and efficient use of GWA personnel and resources.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Major Project Management Services, Construction Inspection, and Major Technical Support after completion.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$250,000
2012		
2013		
2014		
2015		
Project Total		\$250,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-07

Name of Project: SCADA Improvements – Phase 2

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-45

Project Description:

In Phase 2 of this project, the critical water and wastewater pumping stations are monitored by activating and updating the existing Motorola SCADA system. In this phase of the project, the balance of the pumping stations and the treatment facilities are updated and incorporated into the GWA SCADA System. The treatment facility alarms would be identified and activated to a digital telephone text messaging unit to call key operations personnel related to that specific area.

Project Justification:

This phase is a continuation of this project to improve the efficiency and effective utilization of GWA personnel and performance of the water and wastewater pumping systems.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Contract Administration, Major Project Management Services, Construction Inspection and Major Technical Support after completion.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$1,100,000
2012		
2013		
2014		
2015		
Project Total		\$1,100,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-08

Name of Project: SCADA Improvements – Phase 3

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-46

Project Description:

In Phase 3 of this Project, improvements in real time data acquisition for status monitoring and process control is expanded at the treatment facilities through the incorporation of Programmable Logic Controllers (PLCs). The data is conveyed to the GWA Central as well as identified engineering and operations personnel for analysis and process optimization through the use of Virtual Private Networks (VPNs) or other available secured technology. Further improvements and updating of the pumping station SCADA monitoring would be expanded using digital communications (the Gov Guam system is scheduled to be updated during this period) and the radio units would require replacement.

Project Justification:

This phase is a continuation of this project to improve the efficiency and effective utilization of GWA personnel and performance of the water and wastewater pumping systems.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond. .

Project Staffing Implications:

Contract Administration, Major Project Management Services, Construction Inspection and Major Technical Support after completion.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$1,500,000
2012		\$1,000,000
2013		
2014		
2015		
Project Total		\$2,500,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP EE 09-09

Name of Project: SCADA Improvements – Phase 4

Reference Documents:

a) MASTER PLAN, VOLUME 3, TABLE 9-47

Project Description:

In Phase 4 of this project, accounting information such as equipment and parts costs along with the condition data such as equipment operating time and preventive/predictive maintenance programs are to be incorporated into an asset management program. The SCADA system's role will be incorporated into the overall GWA asset management program and the SCADA equipment, hardware, and software will be updated.

Project Justification:

This phase is a continuation of this project to improve the efficiency and effective utilization of GWA personnel and performance of the water and wastewater pumping systems.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Major Project Management Services, and Major Technical Support after completion.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012	Planning/Design/Construction	\$850,000
2013		\$750,000
2014		\$1,250,000
2015		
Project Total		\$2,850,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP MC 05-01

Name of Project: Laboratory Modernization

Reference Documents:

- a) Criteria and specification for Design of the Renovation and Enlargement of the Dededo Laboratory, 4/12/2007.

Project Description:

This project was included in the 2005 bond, but was deferred to 2012. Guam Waterworks Authority (GWA) has received bond money to renovate and expand the main laboratory. The design should be robust so that the laboratory would operate immediately after a typhoon has passed.

Project Justification:

The existing lab is about 2300 square feet with a frontage of 79 feet 2 inches and it will be enlarged to 8400 square feet. The current laboratory is certified by Guam EPA. The renewed laboratory must be capable of maintaining Guam EPA certification.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond.

Project Staffing Implications:

Major Contract Administration, Major Project Management, and Major Construction Management are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$400,000
2012	Planning/Design/Construction	\$400,000
2013		\$400,000
2014		
2015		
Project Total		\$1,200,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP MC 05-02

Name of Project: Land Survey

Reference Documents:

a) Public Law 22-47, 22-28, 22-18

Project Description:

This project will survey GWA property and property to be deeded to GWA and add these properties to GWA assets. GWA has a contract for professional services ongoing for this project.

Project Justification:

GWA has been granted land from the Government of Guam for the purpose of locating water and wastewater system assets such as water storage tanks and water and wastewater treatment plants. The land was granted under the condition that GWA complete a legal boundary survey of the properties.

Financing Options & Grants:

The source of funding for this project will be the 2005 bond, 2011 bond and 2013 bond.

Project Staffing Implications:

Contract Administration, Project Management, Major GIS Support.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		\$192,812
2011	Survey	\$743,000
2012	Survey	\$500,000
2013	Survey	\$500,000
2014		\$493,000
2015		
Project Total		\$2,428,812

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP MC 09-01

Name of Project: General Plant Improvements / Water Distribution System Pipe Replacement

Reference Documents:

Project Description:

General Plant Improvements: These capital improvements project will provide GWA with for general plant improvements that will enhance operations and maintenance capabilities.

Water Distribution System Pipe: This project will replace failing pipelines and adjust pressure zones to improve the water system.

Project Justification:

General Plant Improvements: Capital improvements project are required to help maintain GWA level of service to its customers, these general plant improvements that will enhance operations and maintenance capabilities.

Water Distribution System Pipe: GWA system consists of hundreds of miles of water distribution mains consisting of various pipe sizes and types. Many of these lines are undersized and/or failing due to improper construction, earthquake damage, and/or material failures. Additionally pressure zone changes are needed to improve flow circulation and define pressure zones.

Financing Options & Grants:

The source of funding for this project will be the 2011 bond, 2013 bond and Internally Funded CIP.

Project Staffing Implications:

Contract Administration, Project Management Services, and Construction Management Services are required.

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011	Planning/Design/Construction	\$7,070,000
2012	Planning/Design/Construction	\$6,800,000
2013	Planning/Design/Construction	\$7,500,000
2014	Planning/Design/Construction	\$3,342,000
2015		\$997,000
Project Total		\$25,709,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-01

Name of Project: NDWWTP Interim Capacity 8-9MGD

Reference Documents:

Pre-Final Northern District Wastewater Treatment Plant (WWTP) Interim Improvements
Preliminary Design Report Guam, November 2010

Project Description:

This project will increase capacity at NDWWTP to 8-9 MGD. The project will use advanced primary treatment in order for GWA to meet USEPA APP discharge requirements.

Project Justification:

This project is a requirement in order to accelerate the Military Build-up. The Department of Navy has committed to this project.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$10,000,000
2012		
2013		
2014		
2015		
Project Total		\$10,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-02

Name of Project: NDWWTP Phase 1: Primary Capacity 12 MGD

Reference Documents:

Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.

Project Description:

This project will increase NDWWTP Primary Capacity 12 MGD for GWA to meet USEPA APP discharge requirements. This project will utilize much of the existing plan structures and add major upgrades and modifications.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$60,000,000
2012		
2013		
2014		
2015		
Project Total		\$60,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-03

Name of Project: NDWWTP Phase 2: Secondary Capacity 12MGD

Reference Documents:

- a. Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.
- b. CIP WW 05-03 and CIP WW 11-07
- c. Evaluation of Northern District Wastewater Treatment Plant Capacity, December 2009

Project Description:

This project will increase NDWWTP Primary Capacity 12 MGD for GWA to meet USEPA APP discharge requirements. This project will utilize much of the existing plan structures and add major upgrades and modifications.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$100,000,000
2012		
2013		
2014		
2015		
Project Total		\$100,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-04

Name of Project: NDWWTP Phase 3: Final Capacity 16 MGD

Reference Documents:

Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.

Project Description:

This project will increase NDWWTP Primary Capacity 16 MGD for GWA to meet USEPA secondary treatment requirements.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$29,000,000
2012		
2013		
2014		
2015		
Project Total		\$29,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-05

Name of Project: HWWTP Phase 1: Primary Capacity 12 MGD

Reference Documents:

- a. Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.
- b. WW 11-05, WW 11-06

Project Description:

This project will upgrade HWWTP Primary Capacity to meet USEPA APP discharge requirements.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013		\$15,000,000
2014		
2015		
Project Total		\$15,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-06

Name of Project: HWWTP Phase 2: Secondary Capacity 12MGD

Reference Documents:

Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.

Project Description:

This project will upgrade HWWTP GWA to meet USEPA secondary treatment requirements.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		
2013		\$135,000,000
2014		
2015		
Project Total		\$135,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-07

Name of Project: Central and Northern Systems Wastewater System

Reference Documents:

- a. Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.
- b. WW 05-02, WW 05-06, WW 09-0, WW 09-02, WW 09-04, WW 09-06, & W 09-09

Project Description:

This project will upgrade the sewer collection system and sewer lift stations in the Hagatna Sewer Basin and Northern District Sewer Basin.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office will be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		\$82,000,000
2012		
2013		
2014		
2015		
Project Total		\$82,000,000

**GWA Capital Improvement Plan
Project Sheet FY 2011-2015**

Project Number: CIP DoD-08

Name of Project: Water Transmission loop in Northern Guam

Reference Documents:

Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement July, 16, 2010.

Project Description:

Although this project upgrades the DoD Water System, GWA will have an important role in the design of these upgrades because many of these upgrades will be to supply GWA's water. These Water System Upgrades including new wells, Storage, Transmission, and Transmission loop in Northern Guam.

Project Justification:

This project is a requirement of the Record of Decision for the Mariana Island Range Complex Final Environmental Impact Statement.

Financing Options & Grants:

The Department of Navy is responsible for funding this project

Project Staffing Implications:

A Program management office may be required for GWA to manage this project

Project Time Table/Budget:

FISCAL YEAR	ACTIVITY	BUDGET
Prior Activity		
2011		
2012		\$159,000,000
2013		
2014		
2015		
Project Total		\$159,000,000

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 11-01

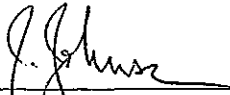
SUPPLEMENTAL ORDER

On this date the Guam Public Utilities Commission ["PUC"] has issued an Order approving certain uses by GWA of its 2010 Series Bond Proceeds. Nothing set forth herein alters or affects the validity of that Order; however, as a result of certain testimony presented by Senator Vicente Cabrera Pangelinan during the LEAC hearing in GPA Docket 10-11, which testimony concerns the Guam Waterworks Authority, the Commission desires to make certain supplemental orders.

Upon review and consideration of the testimony presented by Senator Vicente Cabrera Pangelinan at the PUC meeting of January 31, 2011, for good cause shown and on motion duly made, seconded and carried by the affirmative vote of the undersigned Commissioners, the Guam Public Utilities Commission hereby ORDERS THAT:

1. Legal Counsel shall provide an opinion as to whether (as suggested by Senator Pangelinan) Public Law 30-145 and its mandates should be considered by the PUC prior to approving any future use of bond funds by the Guam Waterworks Authority ["GWA"], and what impact said Public Law has, if any, upon GWA's future use of bond funds.
2. As indicated, this Supplemental Order does not affect the implementation or validity of the Order issued by the PUC in this Docket approving GWA's use of the 2010 Series Bond Proceeds for projects already approved by the Commission.

SO ORDERED this 31st day of January, 2011.



Jeffrey C. Johnson
Chairman



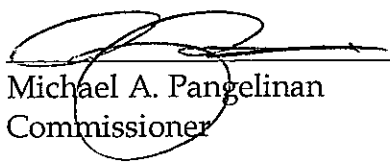
Joseph M. McDonald
Commissioner



Rowena E. Perez
Commissioner



Filomena M. Cantoria
Commissioner



Michael A. Pangelinan
Commissioner

**PUBLIC UTILITIES COMMISSION
OF GUAM**

Jeffrey C. Johnson

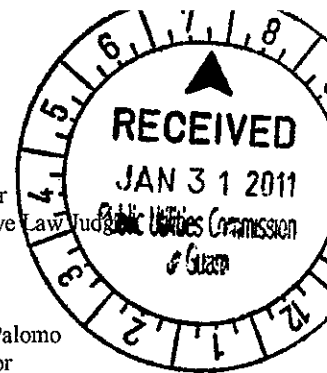
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Telephone: (671) 472-1907
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David A Mair
Administrative Law Judge

Lourdes R. Palomo
Administrator



RESOLUTION NO. 11-01

**RE: ESTABLISHMENT BY THE PUC OF A SCHEDULE FOR THE HOLDING
AND CONDUCT OF REGULAR COMMISSION MEETINGS**

WHEREAS, on February 5, 2009, by Resolution the Commission established a schedule of four "Regular" meetings for the Commission per year, with such meetings to be scheduled for the months of February, May, August and November; and

WHEREAS, since the approval of the prior PUC Resolution scheduling "Regular" meetings, there has been substantial increase in the ongoing work of the Commission; and

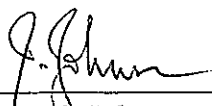
WHEREAS, the PUC is now responsible for the regulatory supervision and control of two additional entities, the Port Authority of Guam and the Solid Waste Division of the Department of Public Works;

NOW, THEREFORE, BE IT

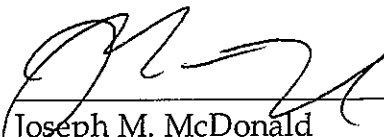
RESOLVED, the PUC hereby establishes that there will be one scheduled "regular" meeting for the Commission each month of the year; regular meetings will be held once a month for each month from January through December.

FURTHER RESOLVED, that the regular meeting of the PUC during each month of the year will be held on the third Monday of each month; provided that, if the third Monday falls on a Guam Holiday recognized by the Legislature, the meeting shall be held on the following Wednesday.

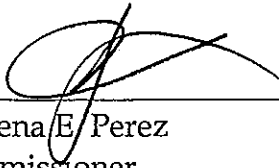
DULY AND REGULARLY ADOPTED ON THIS 31st day of January, 2011.



Jeffrey C. Johnson
Chairman



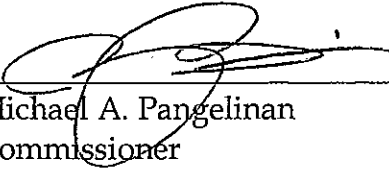
Joseph M. McDonald
Commissioner



Rowena E. Perez
Commissioner



Filomena M. Cantoria
Commissioner



Michael A. Pangelinan
Commissioner