GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

FINANCIAL STATEMENTS, ADDITIONAL INFORMATION AND INDEPENDENT AUDITORS' REPORT

YEARS ENDED SEPTEMBER 30, 2018 AND 2017

(AS RESTATED)

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INDEPENDENT AUDITORS' REPORT

Commissioners
Consolidated Commission on Utilities:

Report on Financial Statements

We have audited the accompanying financial statements of Guam Power Authority (GPA), a component unit of the Government of Guam, which comprise the statements of net position as of September 30, 2018 and 2017, and the related statements of revenues, expenses and changes in net position and of cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Deloitte.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Guam Power Authority as of September 30, 2018 and 2017, and the changes in its net position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of a Matter

As discussed in Note 1 to the financial statements, in 2018, GPA adopted Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (OPEB). GPA has elected to restate its 2017 financial statements to reflect the adoption of this standard. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 1 through 10 as well as the Schedule of Proportional Share of the Net Pension Liability on pages 56 through 58, the Schedule of Pension Contributions on page 59, the Schedule of Changes in the Proportional Share of the Total OPEB Liability and Related Ratios on page 60, the Schedule of Proportional Share of the Total OPEB Liability on page 61, and the Schedule of OPEB Contributions on page 62 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Financial Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The Schedules of Sales of Electricity, Operating and Maintenance Expenses and Salaries and Wages on pages 63 through 66 are presented for purposes of additional analysis and are not a required part of the financial statements.

The Schedules of Sales of Electricity, Operating and Maintenance Expenses and Salaries and Wages are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules of Sales of Electricity, Operating and Maintenance Expenses and Salaries and Wages are fairly stated, in all material respects, in relation to the financial statements as a whole.

Deloitte.

Other Matters, Continued

Other Financial Information, Continued

The Schedule of Employees by Department on page 67 has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 3, 2019 on our consideration of GPA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of GPA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering GPA's internal control over financial reporting and compliance.

Deloitte & Touche LLP

April 3, 2019

This Management's Discussion and Analysis should be read in conjunction with the Guam Power Authority's September 30, 2018 audited financial statements and accompanying notes.

OVERVIEW

The Guam Power Authority (GPA or the Authority) was created in 1968 as a public corporation and autonomous instrumentality of the Government of Guam. Since that time, the Authority has maintained and expanded the island wide power system on Guam. The Authority has 420 megawatts (MW) of generation capacity, 663 miles of transmission and distribution lines, 29 substations, $954 million in assets, and $380 million in annual revenues. GPA currently serves approximately 51,000 customers with the U.S. Navy being the largest representing about 16% of revenues.

In 2002, the Consolidated Commission on Utilities (CCU) was established as the board of directors for both the Guam Power Authority and the Guam Waterworks Authority. The CCU is made up of five elected members and is vested with the same powers exercised by the previous board of directors. In addition, it retains contracting authority, establishes policies and controls over the selection of the top management of the Authority. GPA also continued its existence as a public corporation.

The Authority is regulated by the Guam Public Utilities Commission (PUC) – a rate setting body made up of Commissioners appointed by the Governor of Guam. The PUC has established rules of operation that are similar to those of other jurisdictions within the United States. The PUC has broad regulatory authority over GPA including approval of any contracts that might have an impact on GPA's rates.

GPA'S STRATEGY

GPA is committed to providing outstanding energy solutions to our island community by focusing on capital discipline and operational excellence. Key components of GPA's strategy include:

- Achieve Superior Customer Service – GPA is continuously reaching for ways to better serve our customers through accountability, efficiency and reliability.

- Optimize Energy Production Cost – Focus on driving down cost and on improved productivity.

- Achieve Energy Diversification – GPA implemented an Integrated Resource Plan which includes renewable energy resources such as solar and wind power generating 25 megawatts. An additional 120 megawatts of solar renewable generation have been contracted and approved by the CCU and the PUC.

- Become Financially Sound and Stable – Improve credit rating and debt service coverage.

Promote Energy Innovation

GPA has been operating the smart grid for the past couple of years. The smart grid includes the smart meters for all customers, substation automation, AMI technology and high broadband communication. The smart meters give customers greater control over their energy use and costs by allowing them to monitor their energy consumption online and determine which activities are contributing to the fluctuations in their bills.

In conjunction with the smart grid, GPA has been using the Customer Care and Billing system from Oracle, which enables GPA to improve billing processes, customer service, and credit management. In addition, it enables GPA to integrate to online bill payment, mobile payment applications for Android and Apple, and 24/7 pay-by-phone where account balance and payment posting are real time. Future integrations include prepaid power services and e-billing.

Customers can visit MyEnergy online site which enables customers to see their current usage and past history allowing them to take actions to mitigate their consumption before being charged in their bill. Information also helps customers decide on which energy efficient appliances to purchase.

Lastly, GPA energy statement provides immediate information on energy usage, a historical consumption graphic, a "Tips" section on energy services, rebate program or reminder notices and much more that will enable consumers to manage their energy usage.

Cabras 3 & 4 Fire

On August 31, 2015, GPA experienced a major failure with two of its base load units - Cabras units 3 & 4 - when an explosion and fire occurred in the Cabras 4 engine. The power system lost 78.6 MW of base load capacity. GPA promptly coordinated efforts with large customers to establish 29 MW of interruptible load, run smaller peaking units, and installed 40MW of diesel generation.

In addition, GPA aggressively implemented a rehabilitation plan for its Diesel engines and turbines. GPA activated its decommissioned Dededo Combustion Turbine 1 & 2 of 40MW which became fully operational by April 2017.

Currently, GPA has about 420MW of generation capacity without Cabras 3 & 4 and GPA also has 25MW of renewable generation. In 2018, GPA's peak demand was 254MW, which GPA was able to meet despite the loss of Cabras 3 & 4.

Prior to the outage, Cabras 3 & 4 represented 19% of GPA's total system capacity of 420MW, and GPA's reserve margin was approximately 39% with its peak at 258MW. With the Cabras 3 & 4 baseload out of service, the reserve margin was thin. Low reserve margin caused GPA to shed some load during peak demand and unplanned repairs. Over the past years, GPA was able to bring various small generations online and increased capacity of some generators thus bringing its total capacity back to 420MW.

Due to GPA's service focus efforts, the average customers experienced less than 1% of the total period hours of load shedding.

GPA has in place a $300 million insurance policy with Lloyd's of London and the claim for the explosion damage has been settled. Lastly, the savings on the operational cost from not running Cabras 3 and 4 were used to fund other generation projects.

Integrated Resource Plan

GPA filed its updated 2016 integrated resource plan (IRP) to the CCU and PUC. The IRP included the plan to install 180MW of dual-fired combined-cycle generation units, retirement of Cabras 1 & 2, expansion of a renewable energy portfolio, and installation of energy storage. The 180MW of new generation is planned to be commissioned by December 31, 2021. MEC 8 and 9 of 88MW of generation is to be converted to burn Ultra Low Sulfur Diesel (ULSD) within one year after the commission of the new combined-cycle generation. The PUC have approved GPA's generation plan in October 2016 and GPA hired a consulting engineer to assist with the engineering and procurement.

For GPA, combined-cycle generation has several benefits like better fuel efficiency, lower capital cost compared to installing emission control system to its existing generation plants, promotes fuel diversity and is in compliance with USEPA requirements.

United States Environmental Protection Agency

The United States Environmental Protection Agency (USEPA), under the Clean Air Act, established rules under National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engine Maximum Achievable Control Technology (RICE MACT). These rules require stack emissions control and continuous monitoring systems (CPMS) equipment to be installed on all GPA peaking and base load diesel generators including its Cabras 3 & 4 and MEC 8&9 slow speed units. The deadline for complying with the rules was May 3, 2013. GPA applied for and received an extension for complying with the rules with respect to its small diesel peaking units. The required stack emission equipment was installed within the extension period.

With regards to the slow speed diesel units, GPA engaged the assistance of USEPA along with U.S. Department of Justice (USDOJ) to negotiate a consent decree that will allow sufficient time to implement recommendations in its Integrated Resource Plan (IRP) which included new and efficient generation, renewable energy, and diversification of its fuel sources.

In 2016, the CCU and the PUC approved the procurement of combined combustion turbine plants which will put GPA in compliance with USEPA requirements. GPA believes that ongoing negotiations with USEPA and USDOJ will defer potential fines after the RICE MACT deadlines for the slow speed units. If the consent decree is not reached, the maximum liability for GPA would not exceed $220 million as of January 22, 2019.

FINANCIAL HIGHLIGHTS

The table below highlights the financial comparison from fiscal year 2016 through 2018. In 2018, the Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions.* The implementation of this statement had material effect on the accompanying financial statements resulting in the restatement of the Authority's fiscal year 2017 to reflect the reporting of post-employment benefits other than pension liabilities, deferred inflows of resources and deferred outflows of resources for health insurance in accordance with the provisions of GASB Statement No. 75. See note 1 to the financial statements.

GUAM POWER AUTHORITY
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Management's Discussion and Analysis
Years Ended September 30, 2018 and 2017

In 2017, the Authority adopted GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Relate Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Previsions of GASB Statements 67 and 68*, which aligns the reporting requirements for pension plans not covered in GASB Statements 67 and 68 with the reporting requirements in Statement 68. The implementation of this statement had a material effect on the financial statements resulting in the restatement of the Authority's fiscal year 2016 to reflect the reporting of pension liabilities, deferred inflows of resources and deferred outflows of resources for ad hoc COLAs and supplemental annuity payments and the recognition of pension expense in accordance with the provisions of GASB Statement No. 73. The 2016 financial statements were also restated due to changes in actuarial assumptions and other inputs used to determine the pension liabilities, deferred inflows of resources and deferred outflows of resources of the qualified pension plan.

In 2016, Guam Power Authority implemented GASB Statement No. 72, *Fair Value Measurement and Application*, which addresses accounting and financial reporting issues related to fair value measurements; GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, which eliminates two of the four categories of authoritative GAAP that exist under the existing hierarchy prescribed by Statement No. 55; and GASB Statement No. 79, *Certain External Investment Pools and Pool Participants*, which addresses certain external investment pools and their participants the accounting and financial reporting implications that result from changes in the regulatory provisions referenced by previous accounting and financial reporting standards.

Statements of Net Position (in $million)

	2018	2017 (Restated)	2016 (Restated)
Assets			
Current assets	$ 338.6	$ 349.9	$ 311.2
Non-current investments	10.6	12.5	9.8
Other non-current assets	52.4	61.2	74.4
Utility plant	493.8	494.8	467.5
	895.4	918.4	862.9
Deferred outflows of resources	58.7	53.7	28.3
	$ 954.1	$ 972.1	$ 891.2
Liabilities			
Current liabilities	$ 91.9	$ 116.3	$ 91.9
Non-current liabilities	860.5	880.0	862.8
	952.4	996.3	954.7
Deferred inflows of resources	20.0	4.5	3.7
Net position			
Net investment in capital assets	(39.0)	(40.2)	(49.2)
Restricted	19.8	15.2	4.6
Unrestricted	0.9	(3.7)	(22.6)
	(18.3)	(28.7)	(67.2)
	$ 954.1	$ 972.1	$ 891.2

The decrease in current assets in 2018 compared to 2017 is due to decrease in working capital fund. GPA used its working capital to fund the under recovery from LEAC. In addition, GPA has been reinvesting in its plant assets. The increase in current assets in 2017 compared to 2016 is due to increase in accounts receivable. The accounts receivable increased in 2017 due to the insurance claim from the insurance company for Cabras 3 & 4 fire. (Note 3).

The decrease in the current liabilities in 2018 compared to 2017 is due to completion of capital lease payment of TEMES CT 7 and payment of outstanding capital project. The increase in the current liabilities in 2017 compared to 2016 is attributable to increase in fuel price.

Financial results summary:

- 2018 had an income of $10.4 million compared to an income of $38.5 million in 2017.
- Operating income for 2018 was $38.2 million, compared to $26.7 million in 2017.

The table below details certain items from GPA's Statements of Revenue, Expenses and Changes in Net Position from 2016 through 2018. The presentation below separately identifies activities that impact earnings and cost recovery activities that do not impact earnings.

	2018			**2017 (Restated)**			**2016**		
(in '000)	**Earning Activities**	**Cost Recovery Activities**	**Total Utility**	**Earning Activities**	**Cost Recovery Activities**	**Total Utility**	**Earning Activities**	**Cost Recovery Activities**	**Total Utility**
Sales of Electricity	$ 160,084	$ 217,567	$ 377,651	$ 164,849	$ 166,426	$ 331,275	$ 159,567	$ 146,340	$ 305,907
Other	2,217	-	2,217	2,193	-	2,193	2,294	-	2,294
Total operating revenues	**162,301**	**217,567**	**379,868**	**167,042**	**166,426**	**333,468**	**161,861**	**146,340**	**308,201**
Cost of electricity	-	217,567	217,567	-	166,426	166,426	-	146,340	146,340
Operating and maintenance	86,953	-	86,953	96,080	-	96,081	79,640	-	79,640
Depreciation	37,184	-	37,184	44,292	-	44,292	44,240	-	44,240
Total operating expenses	**124,137**	**217,567**	**341,704**	**140,372**	**166,426**	**306,799**	**123,880**	**146,340**	**270,220**
Operating Income	**38,164**	**-**	**38,164**	**26,670**	**-**	**26,670**	**37,981**	**-**	**37,981**
Interest income			3,260			1,722			1,101
Interest expense			(33,167)			(32,771)			(33,989)
Allowance for funds used during construction			1,686			3,676			4,137
Other expense, net			(1,472)			(846)			(451)
Extraordinary item			1,920			40,049			(19,806)
Income (Loss)			**$ 10,391**			**$ 38,500**			**$ (11,027)**

Operating Revenues

GPA's operating revenues increased by $46.4 million or 13.9% in 2018 compared to 2017. The increase is due to increase in the LEAC rate over the course of the year due to increase in global fuel prices. GPA's operating revenues increased by $25 million or 8.1% in 2017 compared to 2016. The increase is due to increase in demand of electricity and increase in the global fuel price.

Electric Sales Information

	2013	2014	2015	2016	2017	2018
Peak Demand (MW)	257	249	255	258	261	254
Total Electric Sales (MWh)	1,566,410	1,533,323	1,539,587	1,574,000	1,610,093	1,567,052
Sales Growth (%)	0.2	(0.2)	0.4	2.2	2.29	(2.7)
Total Customers	48,598	48,918	49,530	50,207	51,114	51,372

The energy sales decreased by 2.7% in fiscal year 2018 compared to 2017. The decrease is due to conservation efforts by customers due to increase in LEAC rate and lower consumption due to weather during the year. The energy sales increased by 2.29% in fiscal year 2017 compared to fiscal year 2016. The increase in sales is due to increase in peak demand and customer consumption. Annual electric sales were 1,567 gWh and 1,610 gWh for 2018 and 2017, respectively. Number of customers were 51,372 and 51,114 for 2018 and 2017, respectively.

Operating and Maintenance

GPA's operating and maintenance expenses decreased in 2018 compared to 2017 due to the impact of GASB 75 *Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions.* Cost saving measures done in prior years carried the impact to the current year.

GPA's operating and maintenance expenses increased in 2017 compared to 2016 due to GASB 75 *Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions* and addition of 40MW power generation and repairs of existing combustion turbine. In 2016, GPA achieved several costs saving measures like headcount reduction, overtime reduction, fleet fuel consumption cost reduction, greater energy station efficiencies, reduced transmission and distribution (T&D) line loss, and lower merchant service cost from credit cards due to better rates.

GPA headcount decreased to 464 in 2018 from 475 in 2017. Overtime increase from $1.4 million in 2017 to $1.54 million in 2018. Increase in overtime was due to typhoon preparation and recovery.

GPA headcount increased from 436 in 2016 to 475 in 2017. Overtime increased from $1.2 million in 2016 to $1.4 million in 2017.

Station use in 2018 of 62,716 mWh decreased in comparison to 2017 station use of 65,895 mWh. Station use in 2017 of 65,895 mWh remained comparable to 2016 of 64,952 mWh.

T&D line loss increased from 83,949 mWh in 2017 to 84,855 mWh in 2018. T&D line loss increased in 2017 from 80,852 mWh in 2016 to 83,949 mWh in 2017.

Depreciation and Amortization

GPA's depreciation and amortization expense decreased in 2018 compared to 2017. The decrease is due to GPA plant assets reaching the end of their useful lives. Depreciation and amortization expense for 2017 and 2016 remained approximately the same.

Utility Cost Recovery Activities

Cost of Electricity

GPA's cost of electricity includes the costs of fuel used in its own generation facilities, and fuel supplied to other facilities under power purchase agreement, cost of fuel handling and the cost of power purchased from third parties.

In line with the GPA IRP to increase its renewable resources, GPA procured a power purchase agreement for a utility scale solar farm of 25MW with NRG Energy, located in southern Guam and the system became available to the grid in August 2015. The project is performing as expected and it is producing approximately 4,300 MWH of emission free energy each month.

In addition, GPA commissioned 275kW wind project and became operational on March 2016. The $2 million wind projected was funded by USDOI Grant and providing available experience and data on the potential of wind renewable projects.

GPA completed its bid process of acquiring additional 120MW of utility scale solar farm under Phase II renewal project. This project includes batteries to mitigate the sudden drop or increase in production due to electrical or atmospheric condition like rain. GPA signed the contract in 2018 and it is anticipated to be in operations in 2020.

There is Phase III renewable project where GPA will be utilizing 30-year lease of Navy property for 35MW solar PV. The proposed property has been identified and the CCU and PUC have approved the lease.

Interest Income, Interest Expense, and Other Income and Expenses

Interest income increased in 2018 compared to 2017 due to refinancing of 2010 revenue bond. Interest expense decreased in 2017 compared to 2016 due to GPA's lease with independent power producer being near the end of its contracts where principle balance is lower.

Operating Activities

GPA's cash flows from operating activities primarily consist of receipts from customers less payments of operating expenses.

GPA's cash flows from operating activities from 2016 to 2018 are as follows:

(in millions)	**2018**	**2017**	**2016**
Cash received from customers	$ 377.1	$ 326.1	$ 305.2
Cash payments to suppliers	(287.9)	(233.0)	(198.8)
Cash payments to employees for services	(37.2)	(35.5)	(35.3)
Cash payments to retiree benefits	(4.3)	(4.3)	(4.2)
Net cash provided by operating activities	**$ 47.7**	**$ 53.3**	**$ 66.9**

Capital Activities

GPA's capital activities primarily consist of new construction and replacement of facilities necessary to deliver safe and reliable power to its customers. The largest capital costs incurred during 2018 were the land acquisition for the new power plant site ($11M), ESS ($9.2M), distribution plant ($5M), diesel and CT plants system improvements ($2.6M), SCADA ($1.2M) and general plant (5.4M).

The largest capital cost incurred in 2017 are Cabras #1 overhaul ($7.7M), 40MW diesel generation ($32M), Dededo CT 1&2 ($9.4M), Macheche CT ($2.1M), Yigo CT ($2.3M), transmission plant ($4.4M), distribution plant ($6.8M) and general plant ($5.3M).

Cash used in capital activities includes proceeds from bonds and from revenue funds. Please refer to Note 14 to the financial statements for details of GPA's capital activities.

Investing Activities

GPA's cash flows from investing activities from 2016 to 2018 are as follows (in millions):

	2018	**2017**	**2016**
Net cash (used in) provided by investing activities	$ (15.0)	$ 17.4	$ (37.8)

Borrowing Activities

No new borrowing was done in 2016, 2017, and 2018. Refunding of 2010 Revenue bond was done in December 2017. Please refer to Note 7 to the financial statements for details of GPA's borrowing activities.

GPA's cash flows from capital and non-capital financing activities from 2016 to 2018 are as follows (in millions):

	2018	**2017**	**2016**
Net cash provided by non-capital financing activities	$ 43.8	$ 34.0	$ 52.7
Net cash used in capital and related financing activities	$ (91.1)	$ (94.5)	$ (83.4)

Credit Ratings

GPA's credit rating relates to the Authority's cost of funds and liquidity. In particular, GPA's ability to access and engage in certain activities on a cost-effective basis is primarily dependent upon maintaining a strong credit rating.

GPA's long-term senior debt ratings are as follows:

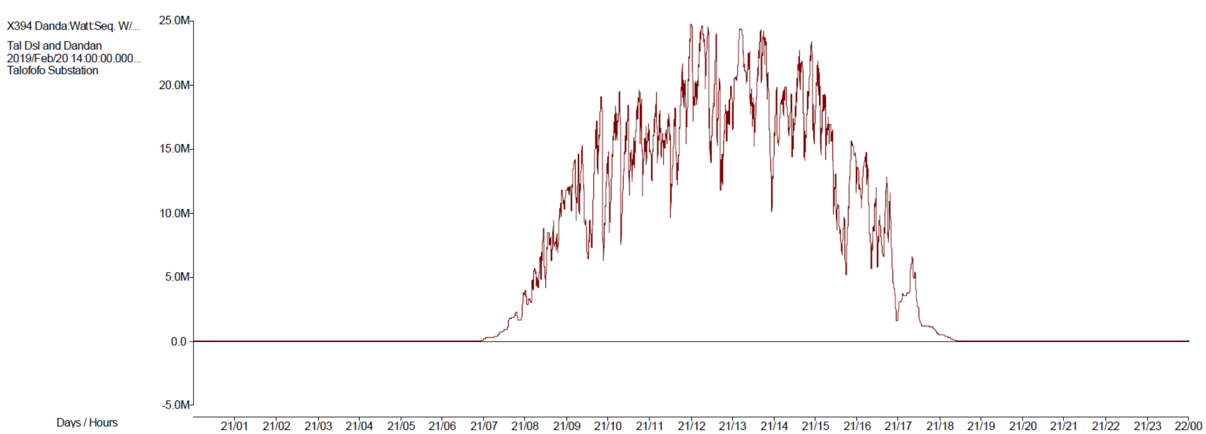
Long-Term Senior Debt	Rating	Long-Term Outlook
Standard & Poor's	BBB	Stable
Moody's Rating	Baa2	Stable
Fitch Rating	BBB-	Positive

Future Capital Activities

GPA is committed to renewable energy and the reduction of greenhouse gas emissions. GPA invested in an industry scale solar farm of 25MW which became operational in 2015. GPA will be adding 120MW of solar PV as part of phase II renewable project and anticipates the system to be online by 2020. Phase III project is underway and is expected to add 35MW of renewable energy with energy storage system (ESS); shifting 100% of the energy to evening load.

The investment of solar farm and increase in net metering customers (NEM) has led to a grid that is becoming physically and operationally very different from historical patterns. The energy received from the solar farm in Dandan and net metering customers are "must take" contracts, meaning their energy goes into the grid whenever they can generate. The Power System Control Center must now monitor and respond to dramatic changes in system frequencies during certain times of the day. These fast changes are known as ramping events. Historically, the need for fast ramping was in response to load changes, but now is also due to generation output from non-GPA sources.

GPA is required to absorb all the power fluctuation emitted by the solar farm, and NEM. On any given day, the solar farm can fluctuate as much as 15MW in an hour. Below is a sample reading for a day on February 21, 2019.



To mitigate the sudden drop in power generation by solar PV, GPA procured an energy storage solution (ESS) to cut the shortfall and inject power to the system to prevent an outage. The ESS system is being installed and should be fully operational around September of 2019.

In 2016, CCU and PUC approved to proceed with the procurement of 180MW dual fire combined cycle combustion turbine. The project is planned to be operational in December 2021.

Future Borrowing

Despite the advancement of renewable energy generation and storage, the traditional power generation is still required. As noted earlier, GPA filed an integrated resource plan (IRP) to the CCU and the PUC for the construction of combined cycle combustion turbine plants and an approval was given by the CCU and the PUC to authorize GPA to proceed with the procurement up to 180MW. The plan for the procurement model is independent power purchase agreement (IPP) where the IPP finance the construction of the plant.

Contacting GPA's Financial Management

The Management Discussion and Analysis report is intended to provide information concerning known facts and conditions affecting GPA's operations. This financial report is designed to provide a general overview of GPA's finances and to demonstrate GPA's accountability for the funds it receives and expends.

Management's Discussion and Analysis for the years ended September 30, 2017 and 2016 is set forth in GPA's report on the audit of financial statements which is dated April 16, 2018. That Discussion and Analysis explains in more detail major factors impacting the 2017 and 2016 financial statements. A copy of that report can be obtained by contacting the CFO office at (671) 648-3066 or from GPA's website at the addresses noted below.

For additional information about this report, please contact Mr. John J.E. Kim, Chief Financial Officer, Guam Power Authority, P.O. Box 2977, Hagåtña, Guam 96932-2977 or visit the website at www.guampowerauthority.com.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Statements of Net Position
September 30, 2018 and 2017

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	2018	2017 As Restated (Note 1)
Current assets:		
Cash and cash equivalents - restricted	$ 111,900,741	$ 119,684,409
Cash and cash equivalents - unrestricted	37,805,471	37,681,703
Total cash and cash equivalents	149,706,212	157,366,112
Certificates of deposit - restricted	1,803,667	7,049,535
Certificates of deposit - unrestricted	999,964	10,248,873
Total certificates of deposit	2,803,631	17,298,408
Investments - restricted	28,426,513	27,354,760
Investments - unrestricted	38,026,695	5,002,970
Accounts receivable, net	37,851,906	77,826,134
Materials and supplies inventory, net	12,812,072	11,989,746
Fuel inventory	67,993,103	52,387,370
Prepaid expenses	979,829	629,586
Total current assets	338,599,961	349,855,086
Utility plant, at cost:		
Depreciable utility plant, net of accumulated depreciation	453,695,490	475,219,795
Non-depreciable utility plant	40,091,847	19,552,409
Total utility plant	493,787,337	494,772,204
Other non-current assets:		
Cash and cash equivalents - restricted	49,970,719	56,907,535
Investments - restricted	10,562,833	10,523,203
Investments - unrestricted	-	1,999,040
Unamortized debt issuance costs	2,503,448	4,267,305
Total other non-current assets	63,037,000	73,697,083
Total assets	895,424,298	918,324,373
Deferred outflows of resources:		
Unamortized loss on debt refunding	27,093,636	11,076,064
Pension	8,932,987	8,698,853
Other post-employment benefits	13,798,017	16,621,449
Unrecovered fuel costs	8,370,542	16,751,048
Unamortized forward delivery contract costs	477,997	637,357
Total deferred outflows of resources	58,673,179	53,784,771
	$ 954,097,477	$ 972,109,144

See accompanying notes to financial statements.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Statements of Net Position, Continued
September 30, 2018 and 2017

LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	2018	2017 As Restated (Note 1)
Current liabilities:		
Current maturities of long-term debt	$ 1,630,000	$ 1,780,000
Current obligations under capital leases	13,613,066	23,330,193
Accounts payable:		
Operations	19,445,106	28,190,510
Fuel	28,979,364	30,802,200
Accrued repair costs	-	5,328,230
Accrued payroll and employees' benefits	1,949,080	1,546,860
Current portion of employees' annual leave	2,101,168	2,045,201
Interest payable	14,745,285	15,065,830
Customer deposits	9,387,519	8,209,228
Total current liabilities	91,850,588	116,298,252
Regulatory liabilities:		
Provision for self-insurance	19,345,291	19,550,977
Total regulatory liabilities	19,345,291	19,550,977
Long-term debt, net of current maturities	604,881,434	590,568,862
Obligations under capital leases, net of current portion	10,808,951	24,428,832
DCRS sick leave liability	1,331,151	4,008,397
Net pension liability	76,554,735	85,875,217
Other post-employment benefits liability	145,955,861	154,134,007
Employees’ annual leave, net of current portion	1,204,085	1,086,456
Customer advances for construction	385,293	369,180
Total liabilities	952,317,389	996,320,180
Deferred inflows of resources:		
Pension	3,532,642	788,894
Other post-employment benefits	14,804,043	1,363,744
Unearned forward delivery contract revenue	1,752,053	2,336,071
Total deferred inflows of resources	20,088,738	4,488,709
Commitments and contingencies		
Net position:		
Net investment in capital assets	(38,960,028)	(40,220,465)
Restricted	19,750,354	15,232,832
Unrestricted	901,024	(3,712,112)
Total net position	(18,308,650)	(28,699,745)
	$ 954,097,477	$ 972,109,144

See accompanying notes to financial statements.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Statements of Revenues, Expenses and Changes in Net Position
Years Ended September 30, 2018 and 2017

	2018	2017 As Restated (Note 1)
Revenues:		
Sales of electricity	$ 378,328,874	$ 331,074,056
Miscellaneous	2,217,201	2,193,478
	380,546,075	333,267,534
Bad debts (expense) recovery	(677,870)	200,589
Net operating revenues	379,868,205	333,468,123
Operating and maintenance expenses:		
Production fuel	217,567,039	166,426,110
Other production	17,414,539	17,762,063
	234,981,578	184,188,173
Depreciation and amortization	37,184,133	44,291,589
Administrative and general	33,971,438	42,337,373
Energy conversion costs	17,552,373	19,935,334
Transmission and distribution	12,338,142	11,749,623
Customer accounting	5,676,402	4,296,347
Total operating and maintenance expenses	341,704,066	306,798,439
Operating income	38,164,139	26,669,684
Non-operating revenues (expense):		
Allowance for funds used during construction	1,686,380	3,675,581
Non-operating grants from the United States (U.S.) Government	1,438,655	153,356
Interest income	3,260,339	1,722,483
Interest expense	(33,167,246)	(32,771,454)
Other expense, net	(2,911,606)	(998,654)
Total non-operating revenues (expense), net	(29,693,478)	(28,218,688)
Income (loss) before extraordinary item	8,470,661	(1,549,004)
Extraordinary item - generator explosion and fire and related insurance recoveries, net	1,920,434	40,049,467
Change in net position	10,391,095	38,500,463
Net position at beginning of year	(28,699,745)	(67,200,208)
Net position at end of year	$ (18,308,650)	$ (28,699,745)

See accompanying notes to financial statements.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Statements of Cash Flows
Years Ended September 30, 2018 and 2017

Increase (decrease) in cash and cash equivalents	2018	2017 As Restated (Note 1)
Cash flows from operating activities:		
Cash received from customers	$ 377,119,167	$ 326,061,020
Cash payments to suppliers for goods and services	(287,912,187)	(233,043,926)
Cash payments to employees for services	(37,205,445)	(35,490,659)
Cash payments for retiree benefits	(4,315,060)	(4,239,420)
Net cash provided by operating activities	47,686,475	53,287,015
Cash flows from investing activities:		
Interest on investments and bank accounts	2,676,321	1,138,466
Decrease in certificates of deposit	14,494,777	9,955,099
(Increase) decrease in investments	(32,136,068)	6,289,121
Net cash (used in) provided by investing activities	(14,964,970)	17,382,686
Cash flows from non-capital financing activities:		
Proceeds from insurance claims	41,844,342	34,040,000
Receipts from the U.S. Government	2,061,297	51,950
Interest paid on deposits	(81,909)	(79,132)
Net cash provided by non-capital financing activities	43,823,730	34,012,818
Cash flows from capital and related financing activities:		
Principal paid on capital leases	(23,337,008)	(21,317,453)
Interest paid on capital leases	(2,890,359)	(4,940,987)
Principal paid on long-term debt	(1,780,000)	(115,000)
Interest paid on long-term debt	(27,090,906)	(25,078,544)
Proceeds from issuance of 2017 bonds	155,588	-
Additions to utility plant	(36,199,266)	(43,057,476)
Net cash used in capital and related financing activities	(91,141,951)	(94,509,460)
Net change in cash and cash equivalents	(14,596,716)	10,173,059
Cash and cash equivalents at beginning of year	214,273,647	204,100,588
Cash and cash equivalents at end of year	$ 199,676,931	$ 214,273,647
Non-cash capital and related financing activities:		
Proceeds from the issuance of 2017 bonds	$ 147,617,433	$ -
Carrying amount of 2010 bonds	(150,440,000)	-
Accrued interest	(1,999,800)	-
Unamortized discount	3,365,676	-
Unamortized debt issuance costs	1,456,691	-
	$ -	$ -

See accompanying notes to financial statements.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Statements of Cash Flows, Continued
Years Ended September 30, 2018 and 2017

	2018	2017 As Restated (Note 1)
Reconciliation of operating earnings to net cash provided by operating activities:		
Operating earnings	$ 38,164,139	$ 26,669,684
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	37,184,133	44,291,589
Bad debts expense (recovery)	677,870	(200,589)
Pension recovery	(6,810,868)	(885,531)
Cabras 4 costs	-	(1,794,874)
Other post-employment benefit costs	8,085,585	9,853,264
(Increase) decrease in assets:		
Accounts receivable	(3,376,312)	(7,084,030)
Materials and supplies inventory	(822,326)	1,565,973
Fuel inventory	(15,605,733)	(21,061,002)
Prepaid expenses	(350,243)	124,437
Increase (decrease) in liabilities:		
Accounts payable	(12,280,454)	33,674,871
Accrued repair costs	(3,407,796)	(16,989,279)
Customer deposits	(66,709)	(172,343)
Customer advances for construction	16,113	49,859
Unrecovered fuel costs	8,380,506	(15,258,993)
Accrued payroll and employees' benefits	402,220	13,224
Employees' annual and sick leave	(2,503,650)	490,755
Net cash provided by operating activities	$ 47,686,475	$ 53,287,015

See accompanying notes to financial statements.

(1) Organization and Summary of Significant Accounting Policies

Organization

Guam Power Authority (GPA) is a component unit of the Government of Guam (GovGuam). GPA provides electrical services on Guam to residential, commercial and GovGuam customers, and to the United States (U.S.) Navy under a Utility Services Contract (USC). GPA is governed by the Consolidated Commission on Utilities (CCU), an elected five-member board. GPA is subject to the regulations of the Public Utilities Commission of Guam (PUC) and has adopted the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission. Because of the rate-making process, certain differences arise in the application of accounting principles generally accepted in the United States of America between regulated and non-regulated businesses. Such differences mainly concern the time at which various items enter into the determination of net earnings in order to follow the principle of matching costs and revenues.

Basis of Accounting

The accounting policies of GPA conform to accounting principles generally accepted in the United States of America, as applicable to governmental entities, specifically proprietary funds. GPA utilizes the flow of economic resources measurement focus. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Taxes

As an instrumentality of GovGuam, GPA and all property acquired by or for GPA, and all revenues and income therefrom are exempt from taxation by GovGuam or by any political subdivision or public corporation thereof and from all taxes imposed under the authority of the Guam Legislature, or with respect to which the Guam Legislature is authorized to grant exemption.

Cash, Cash Equivalents and Investments

Cash and cash equivalents classified as current assets include cash on hand, cash in banks, money market accounts, certificates of deposit, and U.S. treasury bills with original maturities of three months or less in the interest and principal funds for debt repayment, the bond indenture funds, the bond reserve fund, the energy sense fund and the self-insurance fund.

Cash and cash equivalents restricted for the acquisition or construction of capital assets are classified as noncurrent assets.

(1) Organization and Summary of Significant Accounting Policies, Continued

Cash, Cash Equivalents and Investments, Continued

Investments in short-term, highly liquid debt instruments, including commercial paper, banker's acceptances, and U.S. Treasury and agency obligations are recorded at amortized cost. Investment in guaranteed investment certificate is measured at cost.

All other investments are recorded at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability (i.e., the exit price) in an orderly transaction between market participants at the date as of which the fair value of an asset or liability is determined.

The deposit and investment policies of GPA are governed by 5 GCA 21, *Investments and Deposits,* in conjunction with applicable bond indentures. Authorized investments include obligations issued or guaranteed by the U.S. government or agencies of the U.S. government; bonds, notes or other indebtedness rated in the highest rating by Moody's Investors Service (Moody's) or Standard & Poor's Corporation (S&P); obligations issued by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation with remaining maturities of not more than three years; any bonds or other obligations of any state of the U.S. or any agency, instrumentality or local government unit of such state which are rated in the highest rating category of either Moody's or S&P; demand and time deposits in certificates of deposit or bankers acceptances with U.S. domestic banks which have a rating of their short term certificates of deposit of A-1 or better by S&P and P-1 by Moody's and mature no more than 360 days after purchase; commercial paper which has a rating in the highest classification by S&P and Moody's; and money market funds rated AAAm or better by S&P.

Allowance for Doubtful Receivables

The allowance for doubtful receivables is stated at an amount which management believes will be adequate to absorb possible losses on accounts receivable that may become uncollectible based on evaluations of the collectability of these accounts and prior collection experience. The allowance is established through a provision for bad debts charged to expense. Uncollectible accounts are written off against the allowance or are charged to expense in the period GPA deems the accounts to be uncollectible but with prior approval of the CCU.

Inventory Valuation

Materials and supplies inventories and fuel inventories are stated at cost (using the weighted average and the first-in, first-out method, respectively).

Allowance for inventory obsolescence is provided for inventory items with no movement for a period of five years and over and for parts and supplies for equipment no longer in use. Allowance for inventory obsolescence was $1,577,883 and $1,528,226 as of September 30, 2018 and 2017, respectively.

(1) Organization and Summary of Significant Accounting Policies, Continued

Utility Plant

Utility plant purchased or constructed is stated at cost. Cost includes an allowance on certain projects for funds used during construction of specific power generation plants based on the net cost of borrowed funds used for construction purposes. Donated utility is recorded at fair market value at the date of donation or at the donating entity's basis in the asset if donated by GovGuam or a GovGuam agency. Current policy is to capitalize utility plant with a cost of $1,000 or more.

Depreciation

Depreciation is computed under the straight-line method over the estimated useful lives of the respective assets.

Compensated Absences

Vesting annual leave is accrued and reported as an expense and a liability in the period earned. No liability is accrued for non-vesting sick leave benefits. Annual leave expected to be paid out within the next fiscal year is accrued and is included in current liabilities. The maximum accumulation of annual leave convertible to pay upon termination of employment is limited to 320 hours. Pursuant to Public Law 27-106, employees who have accumulated annual leave in excess of three hundred twenty (320) hours as of February 28, 2003, may carry over their excess and shall use the excess amount of leave prior to retirement or termination from service. Any unused leave over 320 hours shall be lost upon retirement.

Public Law 26-86 allows members of the Defined Contribution Retirement System (DCRS) to receive a lump sum payment of one-half of their accumulated sick leave upon retirement. A liability is accrued for estimated sick leave to be paid out to DCRS members upon retirement.

Pensions

Pensions are required to be recognized and disclosed using the accrual basis of accounting. GPA recognizes a net pension liability for the defined benefit pension plan in which it participates, which represents GPA's proportional share of excess total pension liability over the pension plan assets – actuarially calculated – of a single employer defined benefit plan, measured one year prior to fiscal year-end and rolled forward. The total pension liability also includes GPA's proportionate share of the liability for ad hoc cost-of-living adjustments (COLA) and supplemental annuity payments that are anticipated to be made to defined benefit plan members and for anticipated future COLA to DCRS members. Changes in the net pension liability are recorded as pension expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred. Those changes in net pension liability that are recorded as deferred inflows of resources or deferred outflows of resources that arise from changes in actuarial assumptions or other inputs and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the qualified pension plan and recorded as a component of pension expense beginning with the period in which they are incurred. Projected earnings on qualified pension plan investments are recognized as a component of pension expense. Differences between projected and actual investment earnings are reported as deferred inflows of resources or deferred outflows of resources and are amortized as a component of pension expense on a closed basis over a five-year period beginning with the period in which the difference occurred.

(1) Organization and Summary of Significant Accounting Policies, Continued

Other Postemployment Benefits (OPEB)

OPEB is required to be recognized and disclosed using the accrual basis of accounting. OPEB offered to GPA retirees includes health and life insurance. GPA recognizes OPEB liability for the defined benefit OPEB plan in which it participates, which represents GPA's proportional share of total OPEB liability - actuarially calculated - of an agent multiple employer defined benefit plan, measured one year prior to fiscal year-end and rolled forward. An OPEB trust has not been established; thus, the OPEB plan does not presently report OPEB plan fiduciary net position. Instead, the OPEB plan is financed on a substantially "pay-as-you-go" basis.

Changes in the OPEB liability during the period are recorded as OPEB expense, or as deferred inflows of resources or deferred outflows of resources depending on the nature of the change, in the period incurred. Those changes in the OPEB liability that are recorded as deferred inflows of resources or deferred outflows of resources that arise from changes in actuarial assumptions or other inputs and differences between expected or actual experience are amortized over the weighted average remaining service life of all participants in the qualified OPEB plan and recorded as a component of OPEB expense beginning with the period in which they are incurred.

Forward Delivery Contract Costs and Revenues

The forward delivery contract costs and revenues arose as a result of the Bond Reserve Fund Forward Delivery Agreements entered into in September 2000. The unamortized forward delivery contract costs represent termination fees and closing costs while the unearned forward delivery contract revenues represent the gross proceeds. The costs and revenues are amortized on a straight line basis until 2034.

Unamortized Debt Issuance Costs

Unamortized debt issuance costs mainly include insurance costs related to the issuance of the Series 2010, 2012 and 2014 bonds. These costs are being amortized using the effective interest method over the life of the applicable debt. Debt issuance costs related to the 2010 Series bonds were written off in fiscal year 2018 upon issuance of the 2017 Series bonds.

Net Position

Net position represents the residual interest in GPA's assets and deferred outflows of resources after liabilities and deferred inflows of resources are deducted and consist of four sections:

Net investment in capital assets - include capital assets, restricted and unrestricted, net of accumulated depreciation, reduced by outstanding debt net of debt service reserve.

Restricted expendable - net position whose use is subject to externally imposed stipulations that can be fulfilled by actions of GPA pursuant to those stipulations or that expire with the passage of time.

Restricted nonexpendable - net position subject to externally imposed stipulations that require GPA to maintain them permanently.

(1) Organization and Summary of Significant Accounting Policies, Continued

Net Position, Continued

Unrestricted - net position that is not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by management or the CCU or may otherwise be limited by contractual agreements with outside parties.

All of GPA's restricted net position is expendable.

Sales of Electricity

Sales of electricity are recorded as billed to customers on a monthly cycle billing basis. At the end of each month, unbilled revenues are accrued for each cycle based on the unbilled actual usage at month end.

Operating and Non-Operating Revenue and Expenses

Operating revenues and expenses generally result directly from the operation and maintenance of systems to provide electrical services to the island of Guam. Non-operating revenues and expenses result from capital and financing activities, costs and related recoveries from natural disasters, and certain other non-recurring income and costs.

Deferred Outflows of Resources

Deferred outflows of resources represent consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that future time.

Deferred Inflows of Resources

Deferred inflows of resources represent an acquisition of net position that applies to a future period and therefore will not be recognized as an inflow of resources (revenue) until that future time.

Levelized Energy Adjustment Clause

Fuel oil costs increase or decrease billings to customers based on increases or decreases in the price of fuel oil purchased by GPA. Under or over recoveries of fuel oil costs including the fair value of outstanding commodity swap agreements (if any) are recorded as unrecovered fuel cost or unearned fuel revenue, respectively, in the accompanying statements of net position, and are recovered or deducted in future billings to customers based on the Levelized Energy Adjustment Clause (LEAC) approved by the PUC in January of 1996. The LEAC results in the conversion of the monthly fuel charge to a levelized fuel charge, which is reviewed and adjusted by the PUC on a bi-annual basis. GPA is only permitted to recover its actual fuel and related costs. At September 30, 2018 and 2017, GPA has an under recovery of fuel costs of $8,370,542 and $16,751,048, respectively.

(1) Organization and Summary of Significant Accounting Policies, Continued

Derivative Instruments

GPA is exposed to market price fluctuations on its purchases of fuel oil. GPA uses derivatives such as commodity swaps to protect itself from increases in market prices. GPA records commodity swap agreements associated with its fuel oil hedging activities at fair value with gains and losses recognized in operations in the statement of revenues, expenses and changes in net position. The fair value of outstanding commodity swaps at year-end is included as a component of the LEAC and is recorded as part of unrecovered fuel cost or unearned fuel revenue in the accompanying statements of net position. GPA did not have outstanding commodity swap agreements at September 30, 2018 and 2017.

GPA's power purchase agreements are considered "normal purchases and normal sales" and accordingly, the operations and maintenance portions of GPA's energy conversion agreements are not recognized in the statements of net position. Operations and maintenance costs associated with the power purchase agreements are expensed as incurred with the independent power producers.

Allowance for Funds Used During Construction

The allowance for funds used during construction (AFUDC) is provided only for construction projects of more than $50,000, which require a minimum of 90 days to complete. AFUDC is computed using the interest expense on directly assignable borrowings to finance the projects less interest income on the related unused borrowings which have been invested. AFUDC is provided only during the period in which such projects are undergoing activities to prepare them for their intended use and is capitalized as part of the cost of the applicable projects. AFUDC of $1,686,380 and $3,675,581 was recognized during the years ended September 30, 2018 and 2017, respectively.

New Accounting Standards

During the year ended September 30, 2018, GPA implemented the following pronouncements:

- GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, and provides guidance on reporting by governments that provide OPEB to their employees and for governments that finance OPEB for employees of other governments. The implementation of this statement had a material effect on the accompanying financial statements resulting in the restatement of GPA's fiscal year 2017 financial statements to reflect the reporting of the OPEB liability, deferred inflows of resources and deferred outflows of resources for its OPEB plan and the recognition of OPEB expense in accordance with the provisions of GASB Statement No. 75. The implementation of GASB Statement No. 75 results in GPA reporting deferred outflows of resources of $2,820,229 and OPEB liability of $131,843,267 as of October 1, 2016. GPA's net position as of October 1, 2016 and the statement of revenues, expenses, and changes in net position for the year ended September 30, 2017 have been restated to reflect the required adjustments as follows:

(1) Organization and Summary of Significant Accounting Policies, Continued

New Accounting Standards, Continued

	As Previously Reported	Adjustment	As Restated
As of October 1, 2016:			
Net position	$ 61,822,830	$(129,023,038)	$ (67,200,208)
For the year ended September 30, 2017:			
Change in net position	$ 48,353,727	$ (9,853,264)	$ 38,500,463
As of September 30, 2017:			
Deferred outflows of resources related to OPEB	$ -	$ 16,621,449	$ 16,621,449
OPEB liability	$ -	$(154,134,007)	$(154,134,007)
Deferred inflows of resources related to OPEB	$ -	$ (1,363,744)	$ (1,363,744)
Net position	$ 110,176,557	$(138,876,302)	$ (28,699,745)

- GASB Statement No. 81, *Irrevocable Split-Interest Agreements,* which improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement.

- GASB Statement No. 85, *Omnibus 2017*, which addresses practice issues that have been identified during implementation and application of certain GASB Statements including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits).

- GASB Statement No. 86, *Certain Debt Extinguishment Issues*, which improves consistency in accounting and financial reporting for in-substance defeasance of debt.

Except for GASB Statement No. 75, the implementation of these statements did not have a material effect on GPA’s financial statements.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations*, which addresses accounting and financial reporting for certain asset retirement obligations (AROs) associated with the retirement of a tangible capital asset. The provisions in Statement No. 83 are effective for fiscal years beginning after June 15, 2018. Management does not believe that the implementation of this statement will have a material effect on the financial statements.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*, which establishes criteria for identifying fiduciary activities of all state and local governments. The provisions in Statement No. 84 are effective for fiscal years beginning after December 15, 2018. Management does not believe that the implementation of this statement will have a material effect on the financial statements.

(1) Organization and Summary of Significant Accounting Policies, Continued

New Accounting Standards, Continued

In June 2017, GASB issued Statement No. 87, *Leases*, which establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. The provisions in Statement No. 87 are effective for fiscal years beginning after December 15, 2019. Management has yet to determine whether the implementation of this statement will have a material effect on the financial statements.

In April 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, which improves the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. The provisions in Statement No. 88 are effective for fiscal years beginning after June 15, 2018. Management does not believe that the implementation of this statement will have a material effect on the financial statements.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, which requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. The provisions in Statement No. 89 are effective for fiscal years beginning after December 15, 2019. Management does not believe that the implementation of this statement will have a material effect on the financial statements.

In August 2018, GASB issued Statement No. 90, *Majority Equity Interests – an Amendment of GASB Statements No. 14 and No. 61,* which improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and the relevance of financial statement information for certain component units. The provisions in Statement No. 90 are effective for fiscal years beginning after December 15, 2018. Management does not believe that the implementation of this statement will have a material effect on the financial statements.

Reclassification

Certain items in the 2017 financial statements have been reclassified to correspond with the 2018 financial statement presentation.

(2) Cash, Cash Equivalents and Investments

The bond indenture agreements for the 2010, 2012, 2014 and 2017 series revenue bonds (note 7) require the establishment of special funds to be held and administered by trustees and by GPA. In addition, proceeds from borrowings to finance generation and transmission facility construction are maintained by GPA in construction accounts. Funds in these accounts are required by loan agreement or public law to be used for generation and transmission facility construction. Also, certain other funds are restricted by rate orders of the PUC.

(2) Cash, Cash Equivalents and Investments, Continued

At September 30, 2018 and 2017, cash and cash equivalents, certificates of deposit and investments held by trustees and by GPA in these funds and accounts were as follows:

2018	Cash and Cash Equivalents and Certificates of Deposit				Investments		
	Held By Trustees	Held By GPA			Held By Trustees	Held By GPA	
	Bond Indenture Funds	PUC Restricted Funds	Unrestricted Funds	Cash Total	Bond Indenture Funds	Unrestricted Funds	Total
Construction funds	$ 49,970,719	$ -	$ -	$ 49,970,719	$ -	$ -	$ 49,970,719
Interest and principal funds	7,435,094	-	-	7,435,094	10,562,833	-	17,997,927
Working capital funds	15,828,832	-	-	15,828,832	14,684,513	-	30,513,345
Bond reserve fund	34,858,661	-	-	34,858,661	13,742,000	-	48,600,661
Self-insurance fund	-	19,258,353	-	19,258,353	-	-	19,258,353
Revenue funds	14,719,830	-	-	14,719,830	-	-	14,719,830
Energy sense fund	-	1,085,472	-	1,085,472	-	-	1,085,472
Operating funds	-	-	38,805,435	38,805,435	-	38,026,695	76,832,130
Surplus funds	20,518,166	-	-	20,518,166	-	-	20,518,166
	$ 143,331,302	$ 20,343,825	$ 38,805,435	$ 202,480,562	$ 38,989,346	$ 38,026,695	$ 279,496,603

2017	Cash and Cash Equivalents and Certificates of Deposit				Investments		
	Held By Trustees	Held By GPA			Held By Trustees	Held By GPA	
	Bond Indenture Funds	PUC Restricted Funds	Unrestricted Funds	Cash Total	Bond Indenture Funds	Unrestricted Funds	Total
Construction funds	$ 56,907,535	$ -	$ -	$ 56,907,535	$ -	$ -	$ 56,907,535
Interest and principal funds	7,538,676	-	-	7,538,676	10,523,203	-	18,061,879
Working capital funds	20,367,797	-	-	20,367,797	10,353,509	-	30,721,306
Bond reserve fund	34,834,863	-	-	34,834,863	13,742,000	-	48,576,863
Self-insurance fund	-	19,251,372	-	19,251,372	-	-	19,251,372
Revenue funds	10,472,662	-	-	10,472,662	-	-	10,472,662
Energy sense fund	-	1,074,491	-	1,074,491	-	-	1,074,491
Operating funds	-	-	47,930,576	47,930,576	-	7,002,010	54,932,586
Surplus funds	33,194,083	-	-	33,194,083	3,259,251	-	36,453,334
	$ 163,315,616	$ 20,325,863	$ 47,930,576	$ 231,572,055	$ 37,877,963	$ 7,002,010	$ 276,452,028

The operating funds include the remaining insurance monies of $72,039,672 and $49,700,979 as of September 30, 2018 and 2017, respectively, recovered by GPA from the Cabras 3 and 4 explosion and fire insurance claims.

GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, addresses common deposit and investment risks related to credit risk, concentration of credit risk, interest rate risk, and foreign currency risk. As an element of interest rate risk, disclosure is required of investments that have fair values that are highly sensitive to changes in interest rates. GASB Statement No. 40 also requires disclosure of formal policies related to deposit and investment risks.

(2) Cash, Cash Equivalents and Investments, Continued

A. Cash and Cash Equivalents, Continued

Custodial credit risk is the risk that in the event of a bank failure, GPA's deposits may not be returned to it. Such deposits are not covered by depository insurance and are either uncollateralized, or collateralized with securities held by the pledging financial institution or held by the pledging financial institution but not in the depositor-government's name. GPA does not have a deposit policy for custodial credit risk.

As of September 30, 2018 and 2017, the carrying amount of GPA's total cash and cash equivalents and certificates of deposit was $202,480,562 and $231,572,055, respectively, and the corresponding bank balances were $202,627,178 and $231,788,408, respectively. Of the bank balance amount as of September 30, 2018 and 2017, $59,251,773 and $68,427,002, respectively, was maintained in financial institutions subject to Federal Deposit Insurance Corporation (FDIC) insurance. As of September 30, 2018 and 2017, bank deposits in the amount of $933,751 and $988,101, respectively, were FDIC insured. GPA does not require collateralization of its cash deposits; therefore, deposit levels in excess of FDIC insurance coverage are uncollateralized. At September 30, 2018 and 2017, $58,171,406 and $67,222,548, respectively, of cash and cash equivalents and certificates of deposit were subject to custodial credit risk. GPA has not experienced any losses in such accounts and management believes it is not exposed to any significant credit risk on its deposits. Bank balances as of September 30, 2018 and 2017, also include $143,331,302 and $163,315,616, respectively, representing cash and cash equivalents and certificates of deposit held and administered by GPA's trustees in GPA's name in accordance with various trust agreements and bond indentures.

B. Investments

As of September 30, 2018, GPA's investments were as follows:

	Amount	Maturity	Moody's Rating
Current:			
Investments held by trustee – restricted:			
Bond Reserve Fund:			
BNP Paribas Fortis (commercial paper)	$ 13,742,000	Less than 1 year	P-1
Bond Fund:			
Federal Home Loan Banks	7,502,921	Less than 1 year	P-1
Federal National Mortgage Association	2,335,830	Less than 1 year	P-1
Federated Government Ultrashort Duration Fund (mutual fund)	4,845,762	Less than 1 year	Not rated
	28,426,513		
Investments held by GPA - unrestricted:			
Operating Fund:			
Federal Home Loan Banks	17,229,066	Less than 1 year	P-1
Federal Home Loan Mortgage Corporation	12,817,949	Less than 1 year	P-1
U.S. Treasury Note	7,979,680	Less than 1 year	Aaa
	38,026,695		
	$ 66,453,208		

(2) Cash, Cash Equivalents and Investments, Continued

B. Investments, Continued

	Amount	Maturity	Moody's Rating
Noncurrent:			
Investments held by trustee - restricted:			
Bond Fund:			
Bayerische Landesbank Guaranteed			
Investment Certificate (GIC)	$ 10,562,833	More than 10 years	Aa3

As of September 30, 2017, GPA's investments were as follows:

	Amount	Maturity	Moody's Rating
Current:			
Investments held by trustee – restricted:			
Bond Reserve Fund:			
BNP Paribas Fortis (commercial paper)	$ 13,742,000	Less than 1 year	P-1
Bond Fund:			
Federal Home Loan Banks	2,997,780	Less than 1 year	P-1
Federal Farm Credit Banks	1,899,411	Less than 1 year	P-1
Federal Home Loan Mortgage Corporation	2,374,872	Less than 1 year	P-1
Federal National Mortgage Association	1,499,835	Less than 1 year	P-1
Federated Government Ultrashort			
Duration Fund (mutual fund)	4,840,862	Less than 1 year	Not rated
	27,354,760		
Investments held by GPA - unrestricted:			
Operating Fund:			
Federal Home Loan Banks	1,999,460	Less than 1 year	P-1
Federal Farm Credit Banks	1,003,970	Less than 1 year	P-1
Federal Home Loan Mortgage Corporation	999,650	Less than 1 year	P-1
Federal National Mortgage Association	999,890	Less than 1 year	P-1
	5,002,970		
	$ 32,357,730		
Noncurrent:			
Investments held by trustee - restricted:			
Bond Fund:			
Bayerische Landesbank Guaranteed			
Investment Certificate (GIC)	$ 10,523,203	More than 10 years	A1
Investments held by GPA - unrestricted:			
Operating Fund:			
Federal National Mortgage Association	1,999,040	More than 10 years	Aaa
	$ 12,522,243		

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, GPA will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. GPA's investments are held and administered by trustees in accordance with various trust agreements and bond indentures.

(2) Cash, Cash Equivalents and Investments, Continued

B. Investments, Continued

Credit risk for investments is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

Concentration of credit risk for investments is the risk of loss attributed to the magnitude of an entity's investment in a single issuer. GASB Statement No. 40 requires disclosure by issuer and amount of investment in any one issuer that represents five percent (5%) or more of total investments. As of September 30, 2018 and 2017, each of GPA's investments exceeded 5% of total investments, except for the investment in Federal National Mortgage Association which represents 3% of total investments at September 30, 2018.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of debt instruments. Maturities of investments in certain funds are limited to five years to limit interest rate risk. Maturities of investments in all funds may not be later than the dates that such moneys are expected to be required by the trustees.

Investments Measured at Fair Value

GPA categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. As of September 30, 2018 and 2017, the following investments are valued using Level 1 inputs:

	2018	2017
Federated Government Ultrashort Duration Fund (mutual fund)	$ 4,845,762	$ 4,840,862
Federal National Mortgage Association	-	1,999,040
	$ 4,845,762	$ 6,839,902

(3) Receivables

Accounts receivable at September 30, 2018 and 2017, were summarized as follows:

	2018	2017
Customers:		
Private	$ 30,164,613	$ 26,893,888
Government	5,663,115	4,977,262
	35,827,728	31,871,150
U.S. Government - Navy (note 8)	3,340,899	4,020,017
U.S. Government - grants	1,237,944	2,066,272
Insurance	-	41,844,342
Others	807,618	1,224,184
	41,214,189	81,025,965
Less allowance for doubtful receivables	(3,362,283)	(3,199,831)
	$ 37,851,906	$ 77,826,134

(3) Receivables, Continued

Unbilled accounts receivable included in the accounts receivable – private customers amounted to $8,490,893 and $7,768,323 at September 30, 2018 and 2017, respectively.

At September 30, 2017, receivables included $42 million insurance receivables representing insurance recoveries (see note 10). The insurance receivables were collected in 2018.

Substantially all of GPA's customer accounts receivable are from individuals, companies and government agencies based in Guam. Concentrations largely result from accounts receivable from GovGuam agencies and the U.S. Navy. Management assesses the risk of loss and provides for an allowance for doubtful accounts to compensate for known and estimated credit risks.

(4) Obligations Under Capital Leases

In September 1996, GPA entered into energy conversion agreements to purchase electricity produced by generating plants constructed and operated by two companies. The agreements were determined to be capital leases and the generating plants costs were recorded as production plant under capital lease. The agreements have twenty-year terms. In December 2017, one of the energy conversion agreements expired and ownership of the plant was transferred to GPA.

In December 2015, GPA entered into a contract for temporary power services to provide 40 megawatts (MW) of generation. The contract was for one year effective January 2016 with an option to extend for a period to be mutually agreed. In January 2017, GPA extended the contract for four years which includes payments for the acquisition of the underlying power plant.

Under each of the agreements, GPA pays capacity and operation and maintenance costs and purchases fuel for the plants. The operations and maintenance payments are reflected as energy conversion costs under operation and maintenance expenses. Future capacity payments under these agreements are as follows:

Year Ending September 30,	Principal	Interest	Total
2019	$ 13,613,066	$ 916,292	$ 14,529,358
2020	8,582,729	346,471	8,929,200
2021	2,226,222	18,578	2,244,800
	$ 24,422,017	$ 1,281,341	$ 25,703,358

At September 30, 2018 and 2017, the costs of plant and plant improvements were $163,085,831 and $184,849,243 and accumulated depreciation was $66,411,697 and $73,182,614, respectively, which were presented as part of depreciable utility plant in the accompanying statements of net position. The leases have effective interest rates ranging from 5.0% to 13.7%.

(5) Pensions

GPA is statutorily responsible for providing pension benefits for GPA employees through the GovGuam Retirement Fund (GGRF).

A. General Information About the Pension Plans

Plan Description: GGRF administers the GovGuam Defined Benefit (DB) Plan, a single-employer defined benefit pension plan, and the Defined Contribution Retirement System (DCRS) Plan. The DB Plan provides retirement, disability, and survivor benefits to plan members who enrolled in the plan prior to October 1, 1995. Article 1 of 4 GCA 8, Section 8105, requires that all employees of GovGuam, regardless of age or length of service, become members of the DB Plan prior to the operative date. Employees of public corporations of GovGuam, which include GPA, have the option of becoming members of the DB Plan prior to the operative date. All employees of GovGuam, including employees of GovGuam public corporations, whose employment commences on or after October 1, 1995, are required to participate in the DCRS Plan. Hence, the DB Plan became a closed group.

Members of the DB Plan who retired prior to October 1, 1995, or their survivors, are eligible to receive annual supplemental annuity payments. In addition, members of the DB Plan and the DCRS Plan who retired prior to September 30, 2017 are eligible to receive an annual ad hoc cost of living allowance (COLA).

A single actuarial valuation is performed annually covering all plan members and the same contribution rate applies to each employer. GGRF issues a publicly available financial report that includes financial statements and required supplementary information for the DB Plan. That report may be obtained by writing to the Government of Guam Retirement Fund, 424 A Route 8, Maite, Guam 96910, or by visiting GGRF's website – www.ggrf.com.

Plan Membership: As of September 30, 2017 (the measurement date), plan membership consisted of the following:

DB members:	
Inactive employees or beneficiaries currently receiving benefits	7,279
Inactive employees entitled to but not yet receiving benefits	4,289
Active employees	2,058
	13,626
DCRS members:	
Active employees	9,027
	22,653

Benefits Provided: The DB Plan provides pension benefits to retired employees generally based on age and/or years of credited service and an average of the three highest annual salaries received by a member during years of credited service, or $6,000, whichever is greater. Members who joined the DB Plan prior to October 1, 1981 may retire with 10 years of service at age 60 (age 55 for uniformed personnel); or with 20 to 24 years of service regardless of age with a reduced benefit if the member is under age 60; or upon completion of 25 years of service at any age. Members who joined the DB Plan on or after October 1, 1981 and prior to August 22, 1984 may retire with 15 years of service at age 60 (age 55 for uniformed personnel); or with 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 60; or upon completion of 30 years of service at any age.

(5) Pensions, Continued

A. General Information About the Pension Plans, Continued:

Members who joined the DB Plan after August 22, 1984 and prior to October 1, 1995 may retire with 15 years of service at age 65 (age 60 for uniformed personnel); or with 25 to 29 years of service regardless of age with a reduced benefit if the member is under age 65; or upon completion of 30 years of service at any age. Upon termination of employment before attaining at least 25 years of total service, a member is entitled to receive a refund of total contributions including interest. A member who terminates after completing at least 5 years of service has the option of leaving contributions in the GGRF and receiving a service retirement benefit upon attainment of the age of 60 years. In the event of disability during employment, members under the age of 65 with six or more years of credited service who are not entitled to receive disability payments from the United States Government are eligible to receive sixty-six and two-thirds of the average of their three highest annual salaries received during years of credited service. The DB Plan also provides death benefits.

Supplemental annuity benefit payments are provided to DB retiree members in the amount of $4,238 per year, but not to exceed $40,000 per year when combined with their regular annual retirement annuity. Annual COLA payments are provided to DB retiree and DCRS retiree members in a lump sum amount of $2,000. Both supplemental annuity benefit payments and COLA payments are made at the discretion of the Guam Legislature, but are funded on a "pay-as-you-go" basis so there is no plan trust. It is anticipated that ad hoc COLA and supplemental annuity payments will continue to be made for future years at the same level currently being paid.

On September 20, 2016, the Guam Legislature enacted Public Law 33-186, which created two new government retirement plans; the DB 1.75 Plan and the GRSP. Commencing April 1, 2017 through September 30, 2018, eligible employees may elect, during the "election window", to participate in the DB 1.75 Plan or the GRSP with an effective date of January 1, 2018. Beginning January 1, 2018, all new employees shall be automatically enrolled in the GRSP. New employees have sixty (60) days from the date of hire to elect to participate in the DCRS.

The DB 1.75 Plan is open for participation by certain existing employees, new employees, and reemployed employees who would otherwise participate in the DC Plan or the new GRSP and who make election on a voluntary basis to participate in the DB 1.75 Plan by December 31, 2017. Employee contributions are made by mandatory pre-tax payroll deduction at the rate of 9.5% of the employee's base salary while employer contributions are actuarially determined. Members of the DB 1.75 Plan automatically participate in the GovGuam deferred compensation plan, pursuant to which employees are required to contribute 1% of base salary as a pre-tax mandatory contribution.

Contributions and Funding Policy: Contribution requirements of participating employers and active members to the DB Plan are determined in accordance with Guam law. Employer contributions are actuarially determined under the One-Year Lag Methodology. Under this methodology, the actuarial valuation date is used for calculating the employer contributions for the second following fiscal year. For example, the September 30, 2016 actuarial valuation was used for determining the year ended September 30, 2018 statutory contributions. Member contributions are required at 9.55% of base pay.

(5) Pensions, Continued

A. General Information About the Pension Plans, Continued:

As a result of actuarial valuations performed as of September 30, 2016, 2015 and 2014, contribution rates required to fully fund the Retirement Fund liability, as required by Guam law, for the years ended September 30, 2018, 2017 and 2016, respectively, have been determined as follows:

	2018	2017	2016
Normal costs (% of DB Plan payroll)	15.97%	16.27%	15.86%
Employee contributions (DB Plan employees)	9.55%	9.55%	9.54%
Employer portion of normal costs (% of DB Plan payroll)	6.42%	6.72%	6.32%
Employer portion of normal costs (% of total payroll)	1.60%	1.87%	1.94%
Unfunded liability cost (% of total payroll)	22.12%	21.60%	22.42%
Government contribution as a % of total payroll	23.72%	23.47%	24.36%
Statutory contribution rates as a % of DB Plan payroll:			
Employer	27.83%	27.41%	28.16%
Employee	9.55%	9.55%	9.54%

GPA's contributions to the DB Plan for the years ended September 30, 2018, 2017 and 2016 were $4,631,209, $2,284,475 and $2,438,748, respectively, which were equal to the statutorily required contributions for the respective years then ended.

GPA's contributions to the supplemental annuity benefit payments and the COLA payments for the years ended September 30, 2018, 2017 and 2016 were $1,295,324, $1,319,634 and $1,239,078, respectively, which were equal to the statutorily required contributions for the respective years then ended.

Members of the DCRS plan, who have completed five years of government service, have a vested balance of 100% of both member and employer contributions plus any earnings thereon.

Contributions into the DCRS plan by members are based on an automatic deduction of 5% of the member's regular base pay. The contribution is periodically deposited into an individual annuity account within the DCRS. Employees are afforded the opportunity to select from different annuity accounts available under the DCRS.

Statutory employer contributions for the DCRS plan for the year ended September 30, 2018 are determined using the same rates as the DB Plan. Of the amount contributed by the employer, only 5% of the member's regular pay is deposited into the DCRS. The remaining amount is contributed towards the unfunded liability of the defined benefit plan.

GPA's contributions to the DCRS Plan for the years ended September 30, 2018, 2017 and 2016 were $3,035,381, $5,280,871 and $5,075,223, respectively, which were equal to the required contributions for the respective years then ended. Of these amounts, $2,416,600, $4,173,926 and $4,036,044 were contributed toward the unfunded liability of the DB Plan for the years ended September 30, 2018, 2017 and 2016, respectively.

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions:

Pension Liability: At September 30, 2018 and 2017, GPA reported a net pension liability for its proportionate share of the net pension liabilities measured as of September 30, 2017 and 2016, respectively, which is comprised of the following:

	2018	2017
Defined Benefit Plan	$ 58,849,896	$ 71,113,926
Ad Hoc COLA/supplemental annuity Plan for DB retirees	13,986,942	10,942,403
Ad Hoc COLA Plan for DCRS retirees	3,717,897	3,818,888
	$ 76,554,735	$ 85,875,217

GPA's proportion of the GovGuam net pension liabilities was based on GPA's expected plan contributions relative to the total expected contributions received by the respective pension plans for GovGuam and GovGuam's component units. At September 30, 2018 and 2017, GPA's proportionate shares of the GovGuam net pension liabilities were as follows:

	2018	2017
Defined Benefit Plan	5.15%	5.20%
Ad Hoc COLA/supplemental annuity Plan for DB retirees	4.85%	4.77%
Ad Hoc COLA Plan for DCRS retirees	5.95%	6.19%

Pension Expense (Benefit): For the years ended September 30, 2018 and 2017, GPA recognized pension expense (benefit) for its proportionate share of plan pension expense from the above pension plans as follows:

	2018	2017
Defined Benefit Plan	$ 3,180,889	$ 5,405,355
Ad Hoc COLA/supplemental annuity Plan for DB retirees	(4,217,361)	1,135,370
Ad Hoc COLA Plan for DCRS retirees	(294,082)	332,974
	$ (1,330,554)	$ 6,873,699

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, Continued:

Deferred Outflows and Inflows of Resources: At September 30, 2018 and 2017, GPA reported total deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	2018					
	Defined Benefit Plan		Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees		Ad Hoc COLA Plan for DCRS Retirees	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ -	$ -	$ -	$ -	$ 168,924	$ 28,880
Net difference between projected and actual earnings on pension plan investments	-	2,860,028	-	-	-	-
Changes of assumptions	-	-	-	-	375,495	247,266
Contributions subsequent to the measurement date	7,047,809	-	1,185,324	-	110,000	-
Changes in proportion and difference between GPA contributions and proportionate share of contributions	-	138,235	45,435	-	-	257,233
	$ 7,047,809	$ 2,999,263	$ 1,230,759	$ -	$ 654,419	$ 533,379
	2017					
	Defined Benefit Plan		Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees		Ad Hoc COLA Plan for DCRS Retirees	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ -	$ 234,273	$ 856	$ -	$ 73,715	$ 32,144
Net difference between projected and actual earnings on pension plan investments	-	371,960	-	-	-	-
Changes of assumptions	202,481	-	11,287	-	417,059	-
Contributions subsequent to the measurement date	6,458,402	-	1,221,634	-	98,000	-
Changes in proportion and difference between GPA contributions and proportionate share of contributions	33,408	-	55,373	-	126,638	150,517
	$ 6,694,291	$ 606,233	$ 1,289,150	$ -	$ 715,412	$ 182,661

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, Continued:

Deferred outflows resulting from contributions subsequent to measurement date will be recognized as reduction of the net pension liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at September 30, 2018 will be recognized in pension expense as follows:

Year Ending September 30	Defined Benefit Plan	Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees	Ad Hoc COLA Plan for DCRS Retirees
2019	$ (778,780)	$ 45,435	$ (9,195)
2020	(170,287)	-	(9,195)
2021	(1,223,353)	-	(9,195)
2022	(826,843)	-	(9,195)
2023	-	-	(9,195)
Thereafter	-	-	57,015
	$ (2,999,263)	$ 45,435	$ 11,040

Actuarial Assumptions: Actuarially determined contribution rates for the DB Plan are calculated as of September 30, two years prior to the end of the fiscal year in which contributions are reported. The methods and assumptions used to determine contribution rates are as follows:

Valuation Date:	September 30, 2016
Actuarial Cost Method:	Entry age normal
Amortization Method:	Level percentage of payroll, closed
Remaining Amortization Period:	May 1, 2031 (14.58 years remaining as of September 30, 2016)
Asset valuation method:	3-year smoothed market value (effective September 30, 2009)
Inflation:	2.75% per year
Total payroll growth:	2.75% per year
Salary increases:	4.0% to 7.50%
Retirement age:	50% are assumed to retire upon first eligibility for unreduced retirement. Thereafter, the probabilities of retirement are 20% until age 75, and increases to 100% at age 75.
Mortality:	RP-2000 healthy mortality table set forward by 3 years for males and 2 years for females. Mortality for disabled lives is the RP 2000 disability mortality table set forward by 6 years for males and 4 years for females.

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, Continued:

The actuarial assumptions used in the September 30, 2016 valuation were based on the results of an actuarial experience study for the period October 1, 2011 to September 30, 2015.

The investment rate assumption as of September 30, 2016 was 7%. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and the assumed rate of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of the expected nominal return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Nominal Return
U.S. Equities (large cap)	29%	8.78%
U.S. Equities (small cap)	7%	9.45%
Non-U.S. Equities	13%	9.15%
Non-U.S. Equities (small cap)	4%	9.15%
Non-U.S. Equities (emerging markets)	1%	10.75%
U.S. Fixed Income (aggregate)	25%	4.85%
Risk parity	8%	8.36%
High yield bonds	8%	7.35%
Global Real Estate (REITs)	5%	8.71%

Changes in Actuarial Assumptions: The following changes in actuarial assumptions occurred from the September 30, 2015 valuation to the September 30, 2016 valuation:

Mortality: The mortality table used as of September 30, 2016, is the RP-2000 combined mortality table, set forward by 3 years for males and 2 years for females. The mortality table used for disabled lives is the RP-2000 disability mortality table, set forward by 6 years for males and 4 years for females. Mortality improvement is assumed to be 30% of Scale BB, projected generationally from 2016. For the prior valuation, the mortality table used was the RP-2000 combined mortality table, set forward by 4 years for males and 1 year for females. The mortality table used for disabled lives was the RP-2000 disability mortality table for males and females. No provision was made for future mortality improvement in the prior valuation.

Salary Increases: Salaries are assumed to increase 7.5% per year for employees in their first 5 years of service, 6.0% for service between 6 and 10 years, 5.0% for service between 11 and 15 years, and 4.0% for service after 15 years. For the prior valuation, salaries were assumed to increase 7.5% per year for employees in their first 5 years of service, 6.0% for service between 6 and 10 years, 5.0% for service between 11 and 15 years, and 4.5% for service after 15 years.

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, Continued:

Total Payroll Growth: Total payroll for defined benefit and defined contribution members is assumed to increase 2.75% per year. For the prior valuation, total payroll for defined benefit and defined contribution members was assumed to increase 3.0% per year.

Retirement Age: 50% of employees are assumed to retire when first eligible for unreduced retirement. Thereafter, 20% of employees will retire at each year until age 75, at which time all remaining employees are assumed to retire. For the prior valuation, 40% of employees are assumed to retire when first eligible for unreduced retirement. Thereafter, 15% of employees would retire at each year until age 65, and 20% of employees would retire from age 65 until age 70, at which time all remaining employees were assumed to retire.

Rates of Disability: The assumed rates of disability are based on the 1974-78 Society of Actuaries Long Term Disability Non-Jumbo table, with rates reduced by 50% for males and 75% for females. For the prior valuation, these rates were based on the 1974-78 Society of Actuaries Long Term Disability Non-Jumbo, with rates reduced by 50% for both males and females.

Leave Adjustments: Unused leave is assumed to increase a member's service by 1.5 years and increases average earnings by 5% at retirement. For the prior valuation, unused leave is assumed to increase service by 1.5 years and increased average earnings by 10% at retirement.

Survivor Benefit - Minor Children: An average of 0.2 eligible child survivors is assumed at the time of a retiree's death, with payments to the child survivor continuing for 6 years. For the prior valuation, this survivor benefit was assumed to increase the value of retirement benefits by 0.67% and survivor benefits by 20% for active members.

Discount Rate: The discount rate used to measure the total pension liability for the DB Plan as of September 30, 2017 was 7.0% (6.7% as of September 30, 2016), which is equal to the expected investment rate of return. The expected investment rate of return applies to benefit payments that are funded by plan assets (including future contributions), which includes all plan benefits except supplemental annuity payments to DB retirees and ad hoc COLA to both DB and DCRS retirees. The discount rate used to measure the total pension liability for the supplemental annuity and ad hoc COLA payments as of September 30, 2017 was 3.64% (3.058% as of September 30, 2016), which is equal to the rate of return of a high quality bond index.

Discount Rate Sensitivity Analysis: The following presents the sensitivity of the net pension liability to changes in the discount rate. The sensitivity analysis shows the impact to GPA's proportionate share of the net pension liability if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

(5) Pensions, Continued

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions, Continued:

Defined Benefit Plan:

	1% Decrease in Discount Rate 6.0%	Current Discount Rate 7.0%	1% Increase in Discount Rate 8.0%
Net Pension Liability	$ 73,039,584	$ 58,849,896	$ 46,628,462

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees:

	1% Decrease in Discount Rate 2.64%	Current Discount Rate 3.64%	1% Increase in Discount Rate 4.64%
Net Pension Liability	$ 15,261,107	$ 13,986,942	$ 12,878,944

Ad Hoc COLA Plan for DCRS Retirees:

	1% Decrease in Discount Rate 2.64%	Current Discount Rate 3.64%	1% Increase in Discount Rate 4.64%
Net Pension Liability	$ 4,227,641	$ 3,717,897	$ 3,283,598

C. Payables to the Pension Plans:

As of September 30, 2018 and 2017, GPA recorded payables to GGRF of $442,425 and $362,689, respectively, representing statutorily required contributions unremitted as of the respective year-ends.

(6) Other Post-Employment Benefits

A. General Information About the OPEB Plan

Plan Description: GPA participates in the retiree health care benefits program - an agent multiple-employer defined benefit plan administered by the GovGuam's Department of Administration. The OPEB plan provides healthcare benefits to eligible employees and retirees who are members of the GovGuam Retirement Fund. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75. The Governor's recommended budget and the annual General Appropriations Act enacted by the Guam Legislature provide for a premium level necessary for funding the program each year on a "pay-as-you-go" basis. Because the OPEB Plan consists solely of GovGuam's firm commitment to provide OPEB through the payment of premiums to insurance companies on behalf of its eligible retirees, no stand-alone financial report is either available or generated.

(6) Other Post-Employment Benefits, Continued

A. General Information About the OPEB Plan, Continued:

Plan Membership: As of September 30, 2016, the date of the most recent valuation (the actuarial valuation date), plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	7,342
Active plan members	10,282
	17,624

Benefits Provided: GovGuam provides post-employment medical, dental and life insurance benefits to GovGuam retirees, spouses, children and survivors, which are the same benefits as provided to active employees. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit only. GovGuam contributes a portion of the medical and dental premiums, based on a schedule of semi-monthly rates, and reimburses certain Medicare premiums to eligible retirees. Retirees are also required to pay a portion of the medical and dental insurance premiums. Three types of health plans are offered to eligible participants.

- Standard islandwide Preferred Provider Organization (PPO) Plan
- High Deductible (Health Savings Account - HSA) PPO Plan
- Retiree Supplement Plan (RSP)

The PPO and HSA Plans apply to both active employees and retirees and work with set deductible amounts whereas the RSP Plan is an added option for retirees only.

Contributions: No employer contributions are assumed to be made since an OPEB trust has not been established. Instead, the OPEB plan is financed on a substantially "pay-as-you go" basis whereby contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

For the years ended September 30, 2018, 2017 and 2016, GPA reimbursed GovGuam $2,945,357, $2,884,459 and $2,820,229, respectively, for its share of the costs of the above mentioned Plan, which were equal to the statutorily required contributions.

B. Total OPEB Liability

Actuarial Assumptions: The total OPEB liability for the OPEB Plan was determined by an actuarial valuation as of September 30, 2016 rolled forward to September 30, 2017 (the measurement date) using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation:	3.00%
Amortization method:	Level dollar amount over 30 years on an open amortization period for pay-as-you-go funding
Salary increases:	7.5% per year for the first 5 years of service, 6% for 5-10 years, 5% for 11-15 years and 4.5% for service over 15 years

(6) Other Post-Employment Benefits, Continued

B. Total OPEB Liability, Continued:

Healthcare cost trend rates:	8% for 2016, decreasing 0.25% per year to an ultimate rate of 4.5% for 2030 and later years. Health care trend assumptions begin at current levels and grade down over a period of years to a lower level equal to some real rate plus inflation. The principal components of health trend are medical inflation, deductible erosion, cost shifting, utilization, technology and catastrophic claims. The overall effect of these components are expected to decline year by year.
Dental trend rates:	4% per year
Participation rates:	Medical - 100% of eligible retired employees will elect to participate. Dental - 100% of eligible retires will elect to participate. Life - 100% of eligible retirees will elect to participate.
Medicare enrollment:	15% of current and future retirees are assumed to enroll in Medicare and will enroll in a Retiree Supplemental Plan upon attainment of age 65. All employees retired prior to September 30, 2008 are assumed ineligible for Medicare upon attainment of age 65 and therefore will not enroll in a Medicare Supplemental Plan.
Dependent status:	Male spouses are assumed to be three years older and female spouses are assumed to be three years younger than the retired employee. 60% of employees are assumed to retire with a covered spouse. For current retired employees, the actual census information is used.
Actuarial cost method:	Entry Age Normal. The costs of each employee’s post-employment benefits are allocated as a level basis over the earnings of the employee between the employee’s date of hire and the assumed exit ages.
Healthy retiree mortality rate:	RP-2000 Combined Healthy Mortality Table, set forward 4 years and 1 year for males and females, respectively.
Disabled retiree mortality rates:	RP-2000 Disabled Mortality Table for males and females

(6) Other Post-Employment Benefits, Continued

B. Total OPEB Liability, Continued:

Withdrawal rates:	15% for less than 1 year of service, decreasing 1% for each additional year of service up to 10 years, further decreasing 0.5% for each additional year of service up to 15 years, and 2% for service over 15 years.
Disability rates:	0.05% for beneficiaries aged 20-39 years, 0.1%-0.53% for beneficiaries aged 40-59 years, and 0.76% for beneficiaries aged 60-64 years.
Retirement rates:	40% of employees are assumed to retire at earliest eligibility for unreduced benefits under the Government of Guam Retirement Fund, 15% per year thereafter until age 65, 20% per year thereafter until age 70 and 100% at age 70. Previously, 50% of employees were assumed to retire at first eligibility for postretirement health benefits, 20% per year thereafter until age 70, and 100% at age 70.

OPEB Plan Fiduciary Net Position: An OPEB trust has not been established thus the OPEB Plan does not presently report OPEB plan fiduciary net position.

Discount Rate: The discount rate used to measure the total OPEB liability was 3.63% as of September 30, 2017 (3.058% as of September 30, 2016). The projection of cash flows used to determine the discount rate assumed that contributions from GovGuam will be made in accordance with the plan's funding policy. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the 3.63% municipal bond rate as of September 30, 2017 (3.058% as of September 30, 2016) was applied to all periods of projected benefit payments to determine the total OPEB liability.

C. Changes in the Total OPEB Liability

Changes in the total OPEB liability are as follows:

	2018	2017
At October 1	$ 154,134,007	$ 131,843,267
Changes for the year:		
Service cost	4,181,160	3,281,051
Interest	4,805,542	4,969,757
Change of assumptions	(14,827,646)	16,377,134
Benefit payments	(2,337,202)	(2,337,202)
Net change	(8,178,146)	22,290,740
At September 30	$ 145,955,861	$ 154,134,007

(6) Other Post-Employment Benefits, Continued

C. Changes in the Total OPEB Liability, Continued:

Discount Rate Sensitivity Analysis: The following schedule shows the impact on the OPEB Liability if the discount rate used was 1% less than and 1% greater than the discount rate that was used (3.63%) in measuring the 2017 OPEB Liability.

	1% Decrease in Discount Rate 2.63%	Current Discount Rate 3.63%	1% Increase in Discount Rate 4.63%
OPEB Liability	$ 173,502,975	$ 145,955,861	$ 123,860,597

Healthcare Cost Trend Rate Sensitivity Analysis: The following schedule shows the impact on the OPEB Liability if the healthcare cost trend rate used was 1% less than and 1% greater than the current healthcare cost trend rate used (8% decreasing to 4.5%) in measuring the 2017 OPEB Liability.

	1% Decrease 7% Year 1 Decreasing to 3.50%	Healthcare Cost Trend Rates 8% Year 1 Decreasing to 4.50%	1% Increase 9% Year 1 Decreasing to 5.50%
OPEB Liability	$ 119,829,734	$ 145,955,861	$ 180,057,861

D. OPEB Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At September 30, 2018 and 2017, GPA reported a liability of $145,955,861 and $154,134,007, respectively, for its proportionate share of the GovGuam total OPEB liability measured as of September 30, 2017 and 2016. At September 30, 2018 and 2017, GPA's proportion was 6.00% and 6.09%, respectively.

For the years ended September 30, 2018 and 2017, GPA recognized OPEB expense of $11,030,943 and $12,737,723, respectively. At September 30, 2018 and 2017, GPA reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	2018		2017	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	$ 10,852,660	$ 12,507,272	$ 13,736,990	$ -
Contributions subsequent to the measurement date	2,945,357	-	2,884,459	-
Changes in proportion and difference between GPA contributions and proportionate share of contributions	-	2,296,772	-	1,363,744
	$ 13,798,017	$ 14,804,044	$ 16,621,449	$ 1,363,744

(6) Other Post-Employment Benefits, Continued

D. OPEB Liability, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB, Continued:

Deferred outflows resulting from contributions subsequent to measurement date will be recognized as reduction of the OPEB liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB at September 30, 2018 will be recognized in OPEB expense as follows:

Year Ended September 30	
2019	$ (303,461)
2020	(303,461)
2021	(303,461)
2022	(303,461)
2023	(2,682,909)
Thereafter	(54,631)
	$ (3,951,384)

(7) Noncurrent Liabilities

A. Long-term Debt

Long-term debt at September 30, 2018 and 2017 is as follows:

	2018	2017
2017 Series Revenue Refunding Bonds, initial face value of $148,670,000, interest at varying rates from 4.0% to 5.0% per annum payable semi-annually in October and April, principal and mandatory sinking fund payments payable in varying annual installments commencing with a payment of $135,000 in October 2018, increasing to a final payment of $16,800,000 in October 2040.	$ 148,670,000	$ -
2014 Series Senior Revenue Bonds, initial face value of $76,470,000, interest at varying rates from 4.0% to 5.0% per annum payable semi-annually in October and April, principal and mandatory sinking fund payments payable in varying annual installments commencing with a payment of $1,310,000 in October 2017, increasing to a final payment of $4,855,000 in October 2044.	75,160,000	76,470,000
2012 Series Senior Revenue Bonds, initial face value of $340,620,000, interest at varying rates from 2.98% to 5.0% per annum payable semi-annually in October and April, principal and mandatory sinking fund payments payable in varying annual installments commencing with a payment of $110,000 in October 2013, increasing to a maximum payment of $25,630,000 in October 2031, with a final payment of $24,485,000 in October 2034.	339,360,000	339,830,000

(7) Noncurrent Liabilities, Continued

A. Long-term Debt, Continued

		2018		2017
2010 Series Senior Revenue Bonds, initial face value of $150,440,000, interest at varying rates from 5.0% to 5.5% per annum payable semi-annually in October and April, principal and mandatory sinking fund payments payable in varying annual installments commencing with a payment of $225,000 in October 2022, increasing to $17,215,000 in October 2040. Refinanced in December 2017.		-		150,440,000
Total long-term debt		563,190,000		566,740,000
Less current maturities		(1,630,000)		(1,780,000)
		561,560,000		564,960,000
Add premium on 2017, 2014 and 2012 bonds		43,321,434		29,002,672
Less discount on 2010 bonds		-		(3,393,810)
Total bonds	$	604,881,434	$	590,568,862

Proceeds of the 2010 Series Senior Revenue Bonds were used to finance capital projects, generally consisting of a new administration building and various generation, transmission and distribution facilities, make a deposit to the Bond Reserve Fund, provide capitalized interest through October 1, 2013, and pay costs of issuance.

Proceeds of the 2012 Series Revenue Bonds were used to refund GPA's 1993 and 1999 Senior Bonds, make a deposit to the Senior Bond Reserve Fund to increase the amount on deposit therein to the Bond Reserve Fund Requirement, and pay costs of issuance.

Proceeds of the 2014 Series Revenue Bonds were used to finance a variety of generation, transmission and distribution improvements and systems and information technology upgrades, make a deposit to the Senior Bond Reserve Fund, provide capitalized interest through September 30, 2017, and pay costs of issuance.

Proceeds of the 2017 Series Revenue Refunding Bonds were used to refund GPA's 2010 Series Senior Revenue Bonds and to pay costs of issuance.

All gross revenues of GPA have been pledged to repay the 2010, 2012, 2014 and 2017 series bonds principal and interest. For the years ended September 30, 2018 and 2017, the debt service for the 2010, 2012, 2014 and 2017 series bonds was $28,084,161 and $30,532,400, respectively, or approximately 7% and 9%, respectively, of pledged gross revenues.

Premium and discount associated with the 2010, 2012, 2014 and 2017 series bonds at September 30, 2018 and 2017 are being amortized on the effective interest method over the life of the applicable debt.

(7) Noncurrent Liabilities, Continued

A. Long-term Debt, Continued

As of September 30, 2018, future maturities of long-term debt are as follows:

Year Ending September 30,	Principal	Interest	Total Debt Service
2019	$ 1,630,000	$ 28,066,939	$ 29,696,939
2020	16,130,000	27,624,528	43,754,528
2021	20,515,000	26,708,625	47,223,625
2022	21,540,000	25,657,250	47,197,250
2023	22,705,000	24,551,125	47,256,125
2024 through 2028	132,695,000	103,977,125	236,672,125
2029 through 2033	157,575,000	66,979,125	224,554,125
2034 through 2038	112,725,000	30,917,875	143,642,875
2039 through 2043	68,190,000	8,459,650	76,649,650
2044 through 2045	9,485,000	458,475	9,943,475
	$ 563,190,000	$ 343,400,717	$ 906,590,717

Debt Refunding

In October 2012, GPA refunded its 1993 and 1999 Series bonds through the issuance of the 2012 Series bonds. At the time of refunding, the 1993 and 1999 Series bonds had principal balances outstanding of $56,370,000 and $299,680,000, respectively. The proceeds for the refunding were transferred to an escrow agent who used the proceeds to purchase non-callable and non-prepayable obligations of the United States of America or held as cash and are to be held in an irrevocable trust to be used for the payment of the principal of and interest on the 1993 and 1999 Series bonds. The advance refunding met the requirements of an in-substance defeasance and the 1993 and 1999 bonds were removed from GPA's financial statements. The advance refunding resulted in a loss on defeasance totaling $17,283,801 representing the difference between the reacquisition price and the carrying amount of the 1993 and 1999 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GPA in effect reduced its aggregate debt service payments by $16,506,398 over the next twenty years and obtained an economic gain (difference between the present values of the old debt and the new debt service payments) of $27,940,966.

In December 2017, GPA refunded its 2010 Series bonds through the issuance of the 2017 Series bonds. At the time of refunding, the 2010 Series bonds had a principal balance outstanding of $150,440,000. The proceeds for the refunding were transferred to an escrow agent who used the proceeds to purchase non-callable and non-prepayable obligations of the United States of America or held uninvested as cash and are to be held in an irrevocable trust to be used for the payment of the principal of and interest on the 2010 Series bonds. The advance refunding met the requirements of an in-substance defeasance and the 2010 bonds were removed from GPA's financial statements. At September 30, 2018, bonds outstanding of $150,440,000 are considered defeased. The advance refunding resulted in a loss on defeasance totaling $18,390,430 representing the difference between the reacquisition price and the carrying amount of the 2010 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GPA in effect reduced its aggregate debt service payments by $11,528,439 over the next twenty-two years and obtained an economic gain (difference between the present values of the old debt and the new debt service payments) of $7,773,490.

(7) Noncurrent Liabilities, Continued

A. Long-term Debt, Continued

The loss on refunding of the bonds is being amortized using the effective interest method over the average remaining life of the old bonds which approximated the average life of the new bonds. The unamortized balance of the loss on refunding of the 1993 and 1999 Series bonds is $9,834,607 and $11,076,064 as of September 30, 2018 and 2017, respectively. The unamortized balance of the loss on refunding of the 2010 Series bonds is $17,259,029 as of September 30, 2018.

Forward Delivery Contract

On September 28, 2000, GPA entered into Bond Reserve Fund Forward Delivery Agreements (the agreements) with Lehman Brothers and Bank of America. In connection with the agreements, GPA received cash of $13.5 million in October 2000, representing the present value of interest income on certain invested bond proceeds. Based on the terms of the agreements, gross proceeds totaled $17,521,029 while GPA incurred termination fees and closing costs totaling $3,530,000 and $1,250,000, respectively. The $13.5 million in net proceeds included $759,500 of interest income earned as of the closing dates of the agreements.

The gross proceeds, termination fees and closing costs have been deferred and amortized on a straight line basis over the average remaining life of the 1993 and 1999 bonds. The gross proceeds, net of amortization, are reflected as unearned forward delivery contract revenue in the accompanying statements of net position. The termination fees and closing costs are reflected as unamortized forward delivery contract costs in the accompanying statements of net position. The amortization of forward delivery contract revenues and costs is reflected as components of interest income and interest expense, respectively, in the accompanying statements of revenues, expenses and changes in net position.

The following summarizes the unearned revenues and unamortized costs on the forward delivery contract at September 30, 2018 and 2017:

	2018	2017
Unearned forward delivery contract revenues	$ 8,760,514	$ 8,760,514
Accumulated amortization	(7,008,461)	(6,424,443)
	$ 1,752,053	$ 2,336,071
Unamortized forward delivery contract costs	$ 2,390,265	$ 2,390,265
Accumulated amortization	(1,912,268)	(1,752,908)
	$ 477,997	$ 637,357

(7) Noncurrent Liabilities, Continued

B. Long-term Liabilities, Continued

Changes in long-term liabilities were as follows:

	Outstanding October 1, 2017 (as restated)	Increases	Decreases	Outstanding September 30, 2018	Current
2010 Series Senior bonds	$ 150,440,000	$ -	$(150,440,000)	$ -	$ -
2012 Series Senior bonds	339,830,000	-	(470,000)	339,360,000	120,000
2014 Series Senior bonds	76,470,000	-	(1,310,000)	75,160,000	1,375,000
2017 Series Senior bonds	-	148,670,000	-	148,670,000	135,000
Unamortized premium on bonds	29,002,672	17,876,459	(3,557,697)	43,321,434	-
Unamortized discount on bonds	(3,393,810)	-	3,393,810	-	-
Obligations under capital leases	47,759,025	-	(23,337,008)	24,422,017	13,613,066
DCRS sick leave liability	4,008,397	-	(2,677,246)	1,331,151	-
Employees' annual leave	3,131,657	2,678,897	(2,505,301)	3,305,253	2,101,168
Net pension liability	85,875,217	-	(9,320,482)	76,554,735	-
OPEB liability	154,134,007	11,030,942	(19,209,088)	145,955,861	-
Customer advances for construction	369,180	16,113	-	385,293	-
	$ 887,626,345	$ 180,272,411	$(209,433,012)	$ 858,465,744	$ 17,344,234

	Outstanding October 1, 2016 (as restated)	Increases	Decreases	Outstanding September 30, 2017 (as restated)	Current
2010 Series Senior bonds	$ 150,440,000	$ -	$ -	$ 150,440,000	$ -
2012 Series Senior bonds	339,945,000	-	(115,000)	339,830,000	470,000
2014 Series Senior bonds	76,470,000	-	-	76,470,000	1,310,000
Unamortized premium on bonds	31,824,124	-	(2,821,452)	29,002,672	-
Unamortized discount on bonds	(3,506,346)	-	112,536	(3,393,810)	-
Obligations under capital leases	39,609,962	29,466,516	(21,317,453)	47,759,025	23,330,193
DCRS sick leave liability	3,436,738	571,659	-	4,008,397	-
Employees' annual leave	3,212,561	3,033,434	(3,114,338)	3,131,657	2,045,201
Net pension liability	88,899,619	-	(3,024,402)	85,875,217	-
OPEB liability	131,843,267	25,110,969	(2,820,229)	154,134,007	-
Customer advances for construction	319,321	53,683	(3,824)	369,180	-
	$ 862,494,246	$ 58,236,261	$ (33,104,162)	$ 887,626,345	$ 27,155,394

(8) Agreements with the U.S. Navy

On September 15, 1996, a lease agreement was entered into between GPA and the U.S. Navy (Navy) to transfer to GPA the operations, maintenance, and custody of certain Navy-owned electrical transmission and distribution lines, electric power generation facilities, related structures and equipment, together with the associated land interest. The facilities are leased to GPA at no cost for a period of 50 years.

(8) Agreements with the U.S. Navy, Continued

On August 1, 2012, GPA and the Navy entered into a Utility Services Contract (USC) for a period of ten years, unless terminated early at the option of the Navy, with no option for extension. Key features of the USC include transfer of certain Navy facilities to GPA at no charge, calculation of power rates charged to the Navy in accordance with the methodology approved by the PUC, GPA's continued use of the Navy's assets and associated real estate assets at no charge, compensation by GPA to the Navy for energy supplied to GPA's customers from Navy dedicated facilities, weekly fuel payments by the Navy, supply of water to Guam Waterworks Authority (GWA) by the Navy for power generation facilities, maintenance of a minimum contract demand with no maximum demand provision, and payment within fifteen days of electric billing by the Navy, subject to late payment charges. During the years ended September 30, 2018 and 2017, GPA billed the Navy $59,119,199 and $54,904,634, respectively, for sales of electricity under the USC. Receivables from the Navy were $3,340,899 and $4,020,017 at September 30, 2018 and 2017, respectively.

On August 31, 2015, GPA and the Navy entered into a Basic Ordering Agreement (BOA) which enumerates task items that are to be contracted to identify, develop and/or implement work on Navy facilities and utility systems. The tasks are generally related to energy services including renewable energy and energy efficiency. The period during which the orders may be placed against the BOA may not exceed five years. As of September 30, 2018, no work has commenced on this BOA.

On September 12, 2016, GPA and the Navy entered into a lease agreement to lease a portion of the land controlled by the Navy to construct and operate a renewable energy plant. The lease will not be effective until GPA secures the renewable energy contract. No lease payment is due or accruing until then.

(9) Commitments and Contingencies

Fuel Purchase Contracts

In August 2013, GPA entered into a fuel purchase contract with Hyundai Corporation. The agreement is for two years commencing on September 1, 2013 with options to extend for three additional one-year terms upon mutual agreement of both parties. Two extensions were made on the contract, the last extension expired on November 30, 2018.

In January 2015, GPA entered into diesel fuel supply contracts with IP&E Guam, Inc. and Mobil Oil Guam, Inc. The agreements are for three years ending December 31, 2017 with an option to extend for two additional one-year terms, renewable annually. In December 2017, GPA exercised the options and extended the contracts through December 31, 2018.

Performance Management Contracts

GPA entered into a Performance Management Contract (PMC) for the operation and maintenance of the Cabras 1 and 2 generators, which became effective on October 1, 2010. The PMC is for a period of five years with an option to extend for another five-year term. The fees are subject to certain incentives and penalties, as agreed by both parties. The extension was exercised and the PMC expires on September 30, 2020.

(9) Commitments and Contingencies, Continued

Performance Management Contracts, Continued

GPA entered into a PMC for the Dededo, Macheche and Yigo combustion turbine power plants for a period of five years commencing on March 1, 2016 with options to extend for one additional three-year term and one additional two-year term. The fees are subject to certain incentives and penalties, as agreed by both parties.

At September 30, 2018, the minimum future fixed management fees are as follows:

Year Ending September 30,	Amount
2019	$ 2,449,963
2020	2,515,840
2021	293,203
	$ 5,259,006

Fuel Bulk Storage Facility Contract

In September 2017, GPA entered into an agreement for the management and operations of its fuel bulk storage facility. The agreement is for two years ending September 30, 2019 with an option to extend the contract for three additional one-year terms. At September 30, 2018, the minimum future management fees for the year ending September 30, 2019 are $532,057.

Operating Leases

GPA entered into a sublease agreement for vehicle, equipment, and material storage and for a power substation beginning November 1, 2002 with annual rental of $61,261 through October 31, 2012, which was extended for ten years.

GPA entered into a lease agreement for fuel storage tanks effective September 1, 2013. The contract includes fixed annual fees escalating 4% every year until August 31, 2022.

GPA entered into a commercial space lease beginning July 1, 2010, with monthly rentals of $4,495 through June 30, 2015, which was extended for five years.

At September 30, 2018, future minimum lease payments for operating leases are as follows:

Year Ending September 30,	Amount
2019	$ 1,840,086
2020	1,895,598
2021	1,926,902
2022	1,833,929
2023	5,105
	$ 7,501,620

Rent expense under the aforementioned agreements totaled $1,773,744 and $1,709,954 during the years ended September 30, 2018 and 2017, respectively.

(9) Commitments and Contingencies, Continued

Renewable Energy Contracts

GPA entered into two renewable energy purchase agreements to purchase 20 MW and 5.65 MW of solar renewable energy. The commercial operation date of the two solar plants was October 30, 2015. The agreements include escalating contract prices per MW hour until 2041 and 90% minimum production which is the minimum requirement per contract year that is to be met to avoid production shortfall penalties. The total minimum renewable energy purchase commitment is 1.1 million MW hours.

At September 30, 2018, the minimum future renewable energy purchases are as follows:

Year Ending September 30,	Amount
2019	$ 9,157,338
2020	9,162,071
2021	9,171,682
2022	9,200,983
2023	9,196,204
2024 through 2028	46,092,908
2029 through 2033	46,086,152
2034 through 2038	46,760,812
2039 through 2041	19,572,811
	$ 204,400,961

In August 2018, GPA executed three renewable energy purchase agreements to purchase a total of 120 MW of solar renewable energy. The commercial operation dates of the solar plants are not yet established.

Capital Commitments

As of September 30, 2018, GPA has various on-going construction contracts with a total contract price of $40 million, of which $16 million is recorded in construction work in progress.

Letters of Credit

As of September 30, 2018, GPA has a $35 million uncollateralized revolving documentary letter of credit for purchases of fuel. There was an outstanding commitment of $20 million under the standby letter of credit at September 30, 2018.

As of September 30, 2018, GPA has $1.8 million standby letter of credit, collateralized by a certificate of deposit of the same amount, to guarantee any payments due under the temporary power services contract. There was no outstanding commitment under the standby letter of credit at September 30, 2018.

Self-Insurance

GPA self-insures its transmission and distribution (T&D) plant, because no insurance is available at reasonable rates.

(9) Commitments and Contingencies, Continued

Self-Insurance, Continued

As the result of a PUC Order, GPA adds an insurance charge of $0.00290 per kWh for civilian ratepayers and from $0.00035 per kWh to $0.00070 per kWh for the Navy until a self-insurance fund balance of $20 million is achieved. Insurance charge proceeds are transferred to the restricted self-insurance fund to be used to cover losses that would normally be covered by insurance. GPA is not prohibited from petitioning PUC for approval to use the self-insurance fund for additional purposes to the extent that such losses are not covered by insurance.

In 2015, GPA reached the $20 million self-insurance cap and the insurance surcharge was discontinued. The insurance surcharge will be reactivated after the fund balance falls to less than $18 million.

The self-insurance fund, included in cash and cash equivalents held by GPA, was $19,258,353 and $19,251,372 at September 30, 2018 and 2017, respectively.

Litigation

GPA has several asserted and unasserted claims outstanding as of September 30, 2018. It is not possible for the management of GPA to estimate the ultimate resolution of these matters and therefore, no provision for any liability that may result from these claims has been made in the accompanying financial statements.

U.S. Environmental Protection Agency

On May 24, 1986, the administrator of the U.S. Environmental Protection Agency (EPA) granted a continuing exemption to GPA under the provisions of Section 325(b) of the Clean Air Act, as amended. The terms of the exemption require monitoring by EPA, certain commitments by GPA regarding fuel stocks, and reporting and delineation of grounds for revocation of the exemption.

In February 2011, EPA, under the Clean Air Act, established new rules under National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engine Maximum Achievable Control Technology (RICE MACT). These new rules require stack emissions control and continuous monitoring system equipment to be installed on all GPA peaking and baseload diesel generators including its Cabras 3 and 4 and MEC 8 and 9 slow speed diesel units. Compliance under the diesel MACT was due May 3, 2013. Non-compliance under the diesel MACT could result in penalty fees of $37,500 per unit per day. GPA applied for and received a one-year extension for complying with the rules with respect to its small diesel peaking units. The required stack emission equipment was installed within the extension period. As to compliance with the other units subjected to RICE MACT, GPA requested EPA to enter into a consent decree allowing time for GPA to comply with the regulations and allowing potential fines and penalties for non-compliance to be used for compliance with regulations. In January 2015, GPA submitted its compliance plan outlining the proposed timelines for inclusion in the consent decree.

(9) Commitments and Contingencies, Continued

Renewable Energy Contracts, Continued

U.S. Environmental Protection Agency, Continued

Cabras 3 and 4 power plants are no longer subject to compliance due to an explosion and fire in August 2015 (see note 10). As of September 30, 2018, GPA is still negotiating the consent decree with EPA. GPA believes result of negotiations with EPA will defer potential fines post RICE MACT deadlines for the slow speed diesel units. If the consent decree is not reached, the maximum liability of GPA would be $243 million as of September 30, 2018. No liability that may result from potential noncompliance has been recorded in the accompanying financial statements.

EPA also established rules for Electric Generating Unit Maximum Achievable Control Technology (EGU MACT) which applies to Cabras 1 and 2 and Tanguisson steam boiler units. Compliance under the EGU MACT was due in April 2015. Non-compliance could result in penalty fees of $37,500 per unit per day. GPA obtained PUC approval to early terminate the associated energy conversion agreement of the Tanguisson unit. By deactivating the Tanguisson unit, GPA did not incur compliance costs for this unit. As to compliance for Cabras 1 and 2, a consent decree requested from EPA for compliance with RICE MACT is also expected to cover the EGU MACT compliance.

Hazardous Waste Assessment

Guam Public Law 20-110 requires certain entities to remit payments to a hazardous substance expense fund. There are questions as to the enforceability of the law; accordingly, no provision has been made in the accompanying financial statements for payments to be made under this law. GPA is covered by its self-insurance and worker's compensation insurance in case of accidents due to hazardous substances.

Autonomous Agency Collections Fund

On March 31, 2011, GPA received an invoice from the Government of Guam Department of Administration (GovGuam DOA) of $12,250,000 representing an annual assessment of $875,000 for each of the fiscal years 1998 to 2011 pursuant to 5 GCA Chapter 22 Section 22421, *Transfer of Autonomous Agency Revenues To Autonomous Agency Collections Fund*. In September 2013, GPA received another invoice for $875,000 from the Chamorro Land Trust Commission referring to the same annual assessment aforementioned. There was no invoice received for the years ended September 30, 2018 and 2017. GPA obtained approval from the CCU to offer GovGuam DOA a settlement amount of $2.6 million. However, such settlement offer is conditional on the approval by the PUC of a surcharge to recover the assessment from ratepayers. The PUC has not approved the surcharge as of September 30, 2018 and therefore, no liability or other impact has been recognized in the accompanying financial statements.

(9) Commitments and Contingencies, Continued

Merit System

In 1991, Public Law 21-59 was enacted to establish a bonus system for employees of GovGuam, autonomous and semi-autonomous agencies, public corporations and other public instrumentalities of GovGuam who earn a superior performance grade. The bonus is calculated at 3.5% of the employee's base salary beginning 1991 but was suspended by law for the years 1996, 2002, 2003 and 2004. Between 1991 and 2008, GPA did not calculate or pay any bonuses. In 2010, the Guam Legislature authorized GPA to implement a Pay for Performance program, similar to the GovGuam unified pay systems for certified, technical and professional positions, covering the evaluation period of 2009. As of September 30, 2018 and 2017, the CCU determined that there was no liability for employees covered in the new pay system. Therefore, no liability has been recognized in the accompanying financial statements.

Integrated Resource Plan

In 2012, GPA developed its Integrated Resource Plan (IRP). The objectives of the IRP are primarily to identify the timing, size, technology of future power generating units, and to address issues such as fuel diversification and the renewable energy portfolio standards. Specifically, the IRP recommendations include the replacement of older generation equipment with combined cycle combustion turbine generators which can utilize either Liquefied Natural Gas (LNG) or Ultra-Low Sulfur (ULS) diesel fuel oil; adding 40-45 MW of generation from renewable energy sources; and diversification of its fuel source to LNG and ULS diesel fuel oil.

In August 2015, GPA lost 78MW of base load capacity and experienced insufficient generation reserve after the explosion and fire at the Cabras 4 Power Plant. The PUC ordered GPA to update the IRP in consideration of this event. The results of the updated IRP indicated that GPA should procure up to 180 MW of combined cycle units. In October 2016, the PUC authorized GPA to proceed with procurement which shall be based upon the Independent Power Producer (IPP) model. The PUC also ordered GPA to retire Cabras 1 and 2 upon commission of the new combined cycle plants.

GPA reassessed the estimated useful life of Cabras 1 and 2 based on the expected retirement of these plants when the new combined cycle plants becomes operational. GPA recorded additional depreciation expense of approximately $6.2 million and $3.7 million during the years ended September 30, 2018 and 2017, respectively, due to the revised estimated useful life of these power plants.

Asset Retirement Obligation

GPA has power plants that were identified to be retired in the future. Upon retirement, GPA may incur costs to dismantle and clean-up the power plants. GPA has no legal or contractual obligation to perform these actions when they retire their assets; therefore, no provision for this potential cost was recorded in the accompanying financial statements.

(10) Explosion and Fire at Cabras Power Plant

On August 31, 2015, GPA suffered an explosion and fire at its Cabras 3 and 4 generator building. GPA commissioned an investigation and evaluation of the loss of Cabras 4 generator. In 2016, it was determined that Cabras 4 was a total loss. It was later determined that repair of the Cabras 3 generator was economically infeasible. As a result, both the Cabras 3 and 4 generators and related facilities and equipment were written down to zero value at September 30, 2016.

In February 2018, GPA entered into a final insurance settlement of $126 million. GPA applied the insurance recoveries against actual damage incurred and repair costs, and presented these as an extraordinary item in the accompanying financial statements.

The cumulative extraordinary gain estimated as of September 30, 2017 and finalized as of September 30, 2018 is computed as follows:

	2018	2017
Insurance recoveries	$ 125,884,342	$ 125,884,342
Impairment of Cabras 3 and 4	(52,873,884)	(52,873,884)
Temporary power services	(14,334,094)	(13,923,247)
Repair and other costs	(22,190,069)	(24,780,107)
Administrative charges	(4,904,209)	(4,645,452)
Clean-up costs	(1,018,075)	(1,018,075)
Fuel recovery	(4,600,000)	(4,600,000)
Provision for inventory obsolescence	(1,069,158)	(1,069,158)
Revenue loss	(2,730,560)	(2,730,560)
Extraordinary gain	$ 22,164,293	$ 20,243,859

(11) Related Party Transactions and Balances

During the years ended September 30, 2018 and 2017, GPA billed GovGuam agencies $55,108,243 and $48,761,147, respectively, for sales of electricity. Receivables from GovGuam agencies were $5,663,115 and $4,977,262 at September 30, 2018 and 2017, respectively (see note 3).

GPA provides electrical and administrative services to GWA, a component unit of the GovGuam, which is also governed by the CCU. Electricity sales to GWA for the years ended September 30, 2018 and 2017 were $14,686,636 and $12,073,592, respectively. Outstanding receivables were $1,137,558 and $1,083,783 at September 30, 2018 and 2017, respectively, which are included in the GovGuam agencies receivable mentioned above.

(11) Related Party Transactions and Balances, Continued

On June 23, 2009, GPA and GWA entered into a Memorandum of Understanding (MOU) where each agency agrees to provide administrative, operational, maintenance, repair and other specified services on behalf of the other agency and each will reimburse the other for their actual costs for providing said services. Total billings by GPA to GWA for administrative expenses and cost reimbursements were $145,583 and $147,538 for the years ended September 30, 2018 and 2017, respectively. Outstanding receivables totaled $148,169 and $60,520 at September 30, 2018 and 2017, respectively, and were included in other receivables (see note 3).

Effective October 1, 2015, GPA and GWA implemented an agreement to share in the costs of the office building commonly occupied by them for an annual cost of $269,170 due from GWA to GPA. GWA also shares in the actual costs incurred for security, janitorial services, building insurance and other maintenance costs. Total billings by GPA to GWA for its share in the costs of the office building were $409,406 and $454,941 for the years ended September 30, 2018 and 2017, respectively. Outstanding receivables were $69,524 and $36,678 at September 30, 2018 and 2017, respectively, and were included in other receivables (see note 3).

GWA billed GPA for water and sewer charges on the facilities transferred by the Navy to GPA under the USC (see note 8) totaling $1,798,395 and $493,549 for the years ended September 30, 2018 and 2017, respectively. The amount due to GWA at September 30, 2018 and 2017 was $438,872 and $505,031, respectively, which was included in accounts payable - operations in the accompanying statements of net position.

In October 2011, U.S. Federal Emergency Management Agency (FEMA) reimbursed GPA for certain typhoon related costs incurred in 2002 of approximately $1,800,000. The reimbursement was received by GovGuam DOA which plans to offset such amount against billings to GPA related to the Autonomous Agency Collections Fund (see note 9). Due to uncertainty of receipt, GPA has not recorded the reimbursement in the accompanying financial statements.

(12) Restricted Net Position

At September 30, 2018 and 2017, net position was restricted for the following purposes:

	2018	2017
Debt service	$ 3,945,052	$ 3,685,679
Budgeted maintenance and operating expenses	14,719,830	10,472,662
Demand Side Management Program and projects	1,085,472	1,074,491
	$ 19,750,354	$ 15,232,832

(13) Subsequent Events

In January 2019, ownership of the remaining power plant under the energy conversion agreement (see note 4) was transferred to GPA. GPA entered into an agreement with the same company to continue to manage and operate the power plant for a period of five years. GPA will pay a monthly recapitalization fee consisting of payments for capital and performance improvement projects, operations and maintenance costs, 4% cost of money and 10% contingency.

(14) Utility Plant

A summary of changes in capital assets for the years ended September 30, 2018 and 2017 were as follows:

2018	Estimated Useful Lives in Years	Beginning Balance October 1, 2017	Transfers and Additions	Transfers and Deletions	Ending Balance September 30, 2018
Depreciable:					
Steam production plant	25 - 50	$ 123,516,355	$ 120,896	(245,693)	$ 123,391,558
Other production plant	25	225,026,426	28,279,306	(3,051,496)	250,254,236
Transmission plant	30 - 45	182,300,247	1,217,521	-	183,517,768
Distribution plant	25 - 45	225,771,235	4,859,184	(347,536)	230,282,883
General plant	3 - 60	95,607,360	6,107,112	(1,102,615)	100,611,857
Production plant under capital lease	20 - 40	184,849,243	-	(21,763,412)	163,085,831
		1,037,070,866	40,584,019	(26,510,752)	1,051,144,133
Accumulated depreciation		(561,851,071)	(37,184,133)	1,586,561	(597,448,643)
		475,219,795	3,399,886	(24,924,191)	453,695,490
Non-depreciable:					
Land and land rights		1,072,236	10,998,321	-	12,070,557
Construction work in progress		18,480,173	42,330,515	(32,789,398)	28,021,290
		19,552,409	53,328,836	(32,789,398)	40,091,847
		$ 494,772,204	$ 56,728,722	$ (57,713,589)	$ 493,787,337

2017	Estimated Useful Lives in Years	Beginning Balance October 1, 2015	Transfers and Additions	Transfers and Deletions	Ending Balance September 30, 2017
Depreciable:					
Steam production plant	25 - 50	$ 116,221,073	$ 7,786,668	(491,386)	$ 123,516,355
Other production plant	25	225,201,904	17,570,519	(17,745,997)	225,026,426
Transmission plant	30 - 45	178,576,835	4,590,737	(867,325)	182,300,247
Distribution plant	25 - 45	220,981,069	6,170,868	(1,380,702)	225,771,235
General plant	3 - 60	93,158,754	5,255,343	(2,806,737)	95,607,360
Production plant under capital lease	20 - 40	155,382,727	29,466,516	-	184,849,243
		989,522,362	70,840,651	(23,292,147)	1,037,070,866
Accumulated depreciation		(540,262,573)	(44,291,589)	22,703,091	(561,851,071)
		449,259,789	26,549,062	(589,056)	475,219,795
Non-depreciable:					
Land and land rights		1,072,236	-	-	1,072,236
Construction work in progress		17,206,430	61,099,405	(59,825,662)	18,480,173
		18,278,666	61,099,405	(59,825,662)	19,552,409
		$ 467,538,455	$ 87,648,467	$ (60,414,718)	$ 494,772,204

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Proportional Share of the Net Pension Liability
Last 10 Fiscal Years*

Defined Benefit Plan

	2018	2017	2016	2015	2014
Total Government of Guam net pension liability	$ 1,142,249,393	$ 1,368,645,126	$ 1,436,814,230	$ 1,246,306,754	$ 1,303,304,636
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 58,849,896	$ 71,113,926	$ 74,504,797	$ 67,025,973	$ 77,870,353
GPA's proportion of the net pension liability	5.15%	5.20%	5.19%	5.38%	5.97%
GPA's covered-employee payroll**	$ 26,188,178	$ 26,308,182	$ 26,516,476	$ 27,155,671	$ 27,505,038
GPA's proportionate share of the net pension liability as percentage of its covered employee payroll	224.72%	270.31%	280.98%	246.82%	283.11%
Plan fiduciary net position as a percentage of the total pension liability	60.63%	54.62%	52.32%	56.60%	53.94%

* This data is presented for those years for which information is available.
** Covered-employee payroll data from the actuarial valuation date with one-year lag.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Proportional Share of the Net Pension Liability
Last 10 Fiscal Years*

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees

	2018	2017	2016
Total Government of Guam net pension liability***	$ 288,147,121	$ 229,486,687	$ 235,799,709
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 13,986,942	$ 10,942,403	$ 11,002,776
GPA's proportion of the net pension liability	4.85%	4.77%	4.67%
GPA's covered-employee payroll**	$ 24,673,401	$ 24,142,501	$ 23,861,140
GPA's proportionate share of the net pension liability as percentage of its covered employee payroll	56.69%	45.32%	46.11%

* This data is presented for those years for which information is available.
** Covered-employee payroll data from the actuarial valuation date with one-year lag.
*** No assets accumulated in a trust to pay benefits.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Proportional Share of the Net Pension Liability
Last 10 Fiscal Years*

Ad Hoc COLA Plan for DCRS Retirees

	2018	2017	2016
Total Government of Guam net pension liability***	$ 62,445,490	$ 61,688,067	$ 52,115,736
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 3,717,897	$ 3,818,888	$ 3,392,046
GPA's proportion of the net pension liability	5.95%	6.19%	6.51%
GPA's covered-employee payroll**	$ 22,433,189	$ 22,600,153	$ 23,164,094
GPA's proportionate share of the net pension liability as percentage of its covered employee payroll	16.57%	16.90%	14.64%

* This data is presented for those years for which information is available.
** Covered-employee payroll data from the actuarial valuation date with one-year lag.
*** No assets accumulated in a trust to pay benefits.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Pension Contributions
Last 10 Fiscal Years*

	2018	2017	2016	2015	2014
Statutorily required contribution	$ 6,458,402	$ 6,474,792	$ 6,993,365	$ 7,249,568	$ 7,375,045
Contributions in relation to the statutorily required contribution	6,454,286	6,464,756	6,974,715	7,212,224	7,285,774
Contribution (excess) deficiency	$ 4,116	$ 10,036	$ 18,650	$ 37,344	$ 89,271
GPA's covered-employee payroll **	$ 26,188,178	$ 26,308,182	$ 26,516,476	$ 27,155,671	$ 27,505,038
Contribution as a percentage of covered-employee payroll	24.65%	24.57%	26.30%	26.56%	26.49%

* This data is presented for those years for which information is available.
** Covered-employee payroll data from the actuarial valuation date with one-year lag.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Changes in the Proportional Share of the Total OPEB Liability and Related Ratios
Last 10 Fiscal Years*

	2018	2017	2016
Service cost	$ 4,181,160	$ 3,281,051	
Interest	4,805,542	4,969,757	
Change of assumptions	(14,827,646)	16,377,134	
Benefit payments	(2,337,202)	(2,337,202)	
Net change in OPEB liability	(8,178,146)	22,290,740	
OPEB liability, beginning	154,134,007	131,843,267	
OPEB liability, ending	$ 145,955,861	$ 154,134,007	$ 131,843,267
Covered-employee payroll as of valuation date	$ 25,806,659	$ 25,806,659	
OPEB liability as a percentage of covered-employee payroll	565.57%	597.26%	
Notes to schedule:			
Discount rate	3.630%	3.058%	3.710%

Change in benefit terms:
None.

Change of assumptions:
Discount rate has changed from respective measurement dates.

* This data is presented for those years for which information is available.
** No assets accumulated in a trust to pay the benefits.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of Proportional Share of the Total OPEB Liability
Last 10 Fiscal Years*

	2018	2017
Total OPEB liability **	$ 2,431,048,672	$ 2,532,753,040
GPA's proportionate share of the total OPEB liability	$ 145,955,861	$ 154,134,007
GPA's proportion of the total OPEB liability	6.00%	6.09%
GPA's covered-employee payroll	$ 25,806,659	$ 25,806,659
GPA's proportionate share of the total OPEB liability as percentage of its covered-employee payroll	565.57%	597.26%

* This data is presented for those years for which information is available.

** No assets accumulated in a trust to pay the benefits.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A Component Unit of the Government of Guam)

Required Supplemental Information (Unaudited)
Schedule of OPEB Contributions
Last 10 Fiscal Years*

	2018	2017
Actuarially determined contribution	$ 4,181,160	$ 10,762,017
Contributions in relation to the actuarially determined contribution	2,337,202	2,337,202
Contribution deficiency	$ 1,843,958	$ 8,424,815
Covered-employee payroll as of valuation date	$ 25,806,659	$ 25,806,659
Contributions as a percentage of covered-employee payroll	9.06%	9.06%

Notes to schedule:

Valuation date:

Actuarially determined contributions rates are calculated as of September 30, 2016.

Method and assumptions used to determine contributions rates:

Actuarial cost method:	Entry age normal.
Amortization method:	Level dollar amount on an open amortization period for pay-as-you-go funding.
Amortization period:	30 years
Inflation:	3%
Healthcare cost trend rates:	8% initial, decreasing 0.25% per year to an ultimate rate of 4.5%
Salary increase:	4.5% to 7.5%
Mortality (Healthy Retiree):	RP-2000 Combined Healthy Mortality Table, set forward 4 years and 1 year for males and females, respectively.
Mortality (Disabled Retiree):	RP-2000 Disabled Mortality Table for males and females.

* This data is presented for those years for which information is available.

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Schedule of Sales of Electricity
Years Ended September 30, 2018 and 2017

	2018	2017
Commercial	$ 146,278,001	$ 126,806,297
Residential	117,823,431	100,601,978
Government of Guam	55,108,243	48,761,147
U.S. Navy	59,119,199	54,904,634
	$ 378,328,874	$ 331,074,056
Annual Electric Sales in kWh		
Commercial	573,872,719	589,527,624
Residential	495,346,749	506,335,602
Government of Guam	181,923,229	185,678,816
U.S. Navy	306,460,172	318,585,901
Other	9,449,275	9,965,068
	1,567,052,144	1,610,093,011

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Schedule of Operating and Maintenance Expenses
Years Ended September 30, 2018 and 2017

	2018	2017 As Restated (Note 1)
Administrative and General:		
Salaries and wages:		
Regular pay	$ 5,740,084	$ 5,077,260
Overtime	52,003	58,624
Premium pay	3,387	2,863
Benefits	1,835,127	2,369,552
Pension adjustment	2,176,126	8,099,602
OPEB adjustment	3,019,736	9,853,264
Sick leave adjustment	(2,677,246)	-
Total salaries and wages	10,149,217	25,461,165
Retiree healthcare and other benefits	8,085,585	2,884,459
Insurance	7,340,487	7,254,358
Contract	5,288,085	4,074,378
Utilities	2,357,039	1,858,396
Travel	338,664	252,407
Training	157,658	226,188
Operating supplies	104,355	116,870
Other administrative expenses	82,404	87,240
Trustee fee	80,058	68,395
Office supplies	66,374	90,238
Overhead allocations	8,970	7,982
Completed work orders	(295,404)	(1,950)
Miscellaneous	207,946	(42,753)
Total administrative and general	$ 33,971,438	$ 42,337,373
Customer Accounting:		
Salaries and wages:		
Regular pay	$ 2,105,173	$ 1,896,223
Overtime	44,900	96,431
Premium pay	5,098	6,111
Benefits	160,701	140,322
Total salaries and wages	2,315,872	2,139,087
Demand-side management program	1,528,403	658,450
Collection fee	1,088,398	755,944
Contracts	376,221	18,926
Communications	284,396	314,555
Overhead allocations	46,999	46,786
Office supplies	23,022	228,244
Completed work orders	8,435	129,507
Miscellaneous	4,656	4,848
Total customer accounting	$ 5,676,402	$ 4,296,347

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Schedule of Operating and Maintenance Expenses, Continued
Years Ended September 30, 2018 and 2017

	2018	2017 As Restated (Note 1)
Fuel:		
Salaries and wages:		
Regular pay	$ 138,911	$ 96,449
Overtime	7,849	7,853
Premium pay	225	316
Benefits	308	51
Total salaries and wages	147,293	104,669
Fuel	217,419,746	166,321,441
Total fuel costs	$ 217,567,039	$ 166,426,110
Other Production:		
Salaries and wages:		
Regular pay	$ 7,880,985	$ 7,626,659
Overtime	1,099,425	808,904
Premium pay	169,596	166,878
Benefits	730,058	621,219
Total salaries and wages	9,880,064	9,223,660
Contract	5,080,569	6,646,314
Completed work orders	1,781,588	1,231,619
Operating supplies	557,278	545,550
Overhead allocations	102,295	105,438
Office supplies	12,745	9,482
Total other production	$ 17,414,539	$ 17,762,063
Transmission and Distribution:		
Salaries and wages:		
Regular pay	$ 7,097,396	$ 7,017,466
Overtime	319,196	336,227
Premium pay	73,350	71,713
Benefits	508,328	436,612
Total salaries and wages	7,998,270	7,862,018
Overhead allocations	1,959,404	1,800,633
Contract	1,349,250	963,728
Operating supplies	601,629	819,491
Completed work orders	392,785	283,522
Office supplies	36,804	20,231
Total transmission and distribution	$ 12,338,142	$ 11,749,623

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Schedule of Salaries and Wages
Years Ended September 30, 2018 and 2017

	2018	2017 As Restated (Note 1)
Salaries and wages:		
Regular pay	$ 22,962,549	$ 21,714,057
Overtime	1,523,373	1,308,039
Premium pay	251,656	247,881
Benefits	3,234,522	3,567,756
Pension adjustment	2,176,126	8,099,602
OPEB adjustment	3,019,736	9,853,264
Sick leave adjustment	(2,677,246)	-
Total salaries and wages	$ 30,490,716	$ 44,790,599

See Accompanying Independent Auditors' Report.

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)

Employees by Department
Years Ended September 30, 2018 and 2017

	2018	
	Full Time Employees (b)	PL 28-150 Section 45b Category Personnel Services (a)
Department:		
Board	2	$ 244,764
Executive	17	801,687
Administration	24	2,547,319
Finance	40	2,710,870
Planning and Regulatory	8	837,328
Property and Facilities	9	481,352
Purchasing and Supply Management	21	679,038
Customer Service	38	1,767,953
Engineering	37	2,208,183
Generation	128	10,098,937
Strategic Planning and Operation Research and Development	9	868,293
Power System Control Center	22	1,656,278
Transportation	11	80,172
Transmission and Distribution	98	5,166,052
Total full time employees	464	30,148,226
OPEB adjustment		3,019,736
Sick leave adjustment for change in retirement plan		(2,677,246)
		$ 30,490,716

	2017, As Restated (Note 1)	
	Full Time Employees (b)	PL 28-150 Section 45b Category Personnel Services (a)
Department:		
Board	2	$ 177,491
Executive	18	568,903
Administration	25	1,879,711
Finance	42	2,089,545
Planning and Regulatory	7	711,888
Property and Facilities	9	385,921
Purchasing and Supply Management	21	540,095
Customer Service	35	1,630,173
Engineering	37	1,981,197
Generation	140	9,102,360
Strategic Planning and Operation Research and Development	10	709,897
Power System Control Center	21	1,690,128
Transportation	9	46,833
Transmission and Distribution	100	4,977,846
Total full time employees	476	26,491,988
Pension adjustment		8,099,602
OPEB adjustment		9,853,264
Apprentice and summer engineering		345,745
		$ 44,790,599

Note:
(a) The amounts consist of total payroll charge to O & M for the year end funded by revenues.
(b) Filled positions at the end of the year, excluding apprentices.

See Accompanying Independent Auditors' Report.