Financial Statements, Required Supplementary Information, and Supplementary and Other Information

Guam Power Authority
(A Component Unit of the Government of Guam)

Year ended September 30, 2022
with Report of Independent Auditors

Building a better working world

Guam Power Authority
(A Component Unit of the Government of Guam)

Financial Statements, Required Supplementary Information,
and Supplementary and Other Information

Year ended September 30, 2022

Contents

Building a better
working world

Ernst & Young LLP
231 Ypao Road
Suite 201 Ernst & Young Building
Tamuning, Guam 96913

Tel: +1 671 649 3700
Fax: +1 671 649 3920
ey.com

Report of Independent Auditors

Commissioners
Consolidated Commission on Utilities:

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the business-type activities and fiduciary activities of Guam Power Authority (GPA or the Authority), as of and for the year ended September 30, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and fiduciary activities of the Guam Power Authority as of September 30, 2022, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- Obtain an understanding of internal control relevant to the audit 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 Authority's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 12 as well as the Schedules of Proportional Share of the Net Pension Liability on pages 58 through 60, the Schedule of Pension Contributions on page 61, the Schedule of Changes in the Proportional Share of the Total OPEB Liability and Related Ratios on page 62, the Schedule of Proportional Share of the Total OPEB Liability on page 63, and the Schedule of OPEB Contributions on page 64 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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.

Supplementary Information and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The Schedules of Sales of Electricity, Operating and Maintenance Expenses and Salaries and Wages on pages 65 through 68 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. 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 basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 16, 2023 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.

Ernst + Young LLP

August 16, 2023

This Management's Discussion and Analysis should be read in conjunction with the Guam Power Authority's September 30, 2022 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 then, the Authority has maintained and expanded Guam's island-wide power system. The Authority has over 400 megawatts (MW) of generation capacity, 204 miles of transmission and 1,650 miles of distribution lines, 29 substations, $906 million in assets, and $479 million in annual revenues. GPA currently serves approximately 52,800 customers, with the U.S. Navy being the largest representing about 18% of revenues.

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

The Authority is regulated by the Guam Public Utilities Commission (PUC) – a rate-setting body of Commissioners appointed by the Governor of Guam. The PUC has established rules of operation similar to those of other jurisdictions within the United States. As a result, the PUC has broad regulatory authority over GPA, including approval of any contracts that might impact 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 its Integrated Resource Plan, which includes renewable energy resources like solar and wind power generating 85.3 megawatts. The latest completion of renewable solar generation was 60 megawatts in Marbo which became fully operational in June 2022.

- Become Financially Sound and Stable – Improve credit rating and debt service coverage. GPA has been an investment-grade credit rating for over eleven years.

GPA's STRATEGY, continued

Promote Energy Innovation

GPA has been operating the smart grid for over ten years. The smart grid includes smart meters for all customers, substation automation, AMI technology, and high broadband communication. 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 contribute to the fluctuations in their bills.

In conjunction to the smart grid, GPA has been using Customer Care and Billing from Oracle, a billing system that enables GPA to improve the billing process, customer service, and credit management. In addition, it allows GPA to integrate into online bill payment, mobile payment applications for Android and Apple, and 24/7 pay-by-phone where account balance and payment postings are real-time.

These systems enabled the rollout of prepay electricity services and e-billing. Prepay electricity service allows consumers to monitor and control what they spend on their energy consumption and manage their budget. E-billing, through paygpa.com, enables customers to view their statements online.

Customers can visit myenergyguam.com, which lets them see their current usage and history, allowing them to mitigate their consumption before being charged in their bill. Information also helps customers decide on which energy-efficient appliances to purchase.

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

New Generation

In 2016, GPA filed its updated integrated resource plan (IRP) to the CCU and PUC. The IRP included the plan to install 180MW of duel-fired combined-cycle generation units, the retirement of Cabras 1 & 2, expand the renewable energy portfolio, and install energy storage. The PUC approved GPA's generation plan in October 2016, and procurement was completed in 2019.

The new generation was awarded to Korea Electric Power Corporation (KEPCO) as a build-operate-transfer contract and is in the plan to be commissioned in 2024. For GPA, combined-cycle generation has several benefits, like better fuel efficiency and lower capital cost, compared to installing an emission control system in its existing generation plants. In addition, it promotes fuel diversity and compliance with USEPA requirements.

GPA's STRATEGY, continued

United States Environmental Protection Agency

The United States of America, on behalf of the Unites States Environmental Protection Agency (EPA) filed its complaint under the Clean Air Act. The United States' complaint sought injunctive relief and civil penalties for the alleged violations of the emission limits and performance testing requirements in the National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations that govern the operation of stationary reciprocating internal combustion engines and electric utility steam generating units at GPA's Cabras and Piti power plants.

In early 2020, GPA, EPA, and the Justice Department finalized a settlement to resolve the alleged violations. The parties subsequently lodged a consent decree with the United States District Court in Guam which approved the Consent Decree in April 2020.

Under the terms of the settlement, GPA will build and operate a new power plant burning ultra-low sulfur diesel (USLD), and capable of burning liquified natural gas (LNG), convert fuel delivery system from residual fuel oil to ULSD, build 100MW of solar power, install and operate new energy storage system, and pay a civil penalty of $400,000 to resolve the United States' allegations.

In January 2022, the United States District Court of Guam approved a revised consent decree. The revision extended the building of the 198 MW power plant until April 2024.

FINANCIAL HIGHLIGHTS

The table below highlights the financial comparison for fiscal year 2022 and 2021. The adoption of GASB 87 *Leases* was the beginning of fiscal year 2022 and fiscal year 2021 was not restated.

(in '000)	2022	2021
Assets		
Current assets	$ 305.1	$ 309.3
Lease assets, net	17.0	---
Non-current investments	11.2	41.1
Other non-current assets	39.6	14.2
Utility plant	475.0	484.5
	847.9	849.1
Deferred outflows of resources	66.5	86.2
	$ 914.4	$ 935.3

FINANCIAL HIGHLIGHTS, continued

(in '000)	2022	2021
Liabilities		
Current liabilities	$ 68.6	$ 72.3
Non-current liabilities	764.9	788.1
	833.5	860.4
Deferred inflows of resources	57.8	65.1
Net Position		
Net investment in capital assets	33.0	10.1
Restricted	14.0	40.1
Unrestricted	(23.9)	(40.4)
	23.1	9.8
	$ 914.4	$ 935.3

The decrease in current assets in 2022 compared to 2021 is attributed to the increase in the under-recovery of fuel charges and meeting debt service payments.

The decrease in the current liabilities in 2022 compared to 2021 is due refunding of the Revenue Bonds 2012 Series A where the closing of the bonds occurred on July 2022.

Financial results summary:

- 2022 has an income of $14.4 million compared to $8.2 million in 2021.

The table below details certain items from GPA's Statements of Revenue, Expenses, and Changes in Net Position for 2022 and 2021.

(in '000)	**2022**	**2021**
Sales of Electricity, net	$ 473,561	$ 323,189
Other	4,992	6,160
Total operating revenues	478,553	329,349
Production Fuel	315,771	180,807
Operating and maintenance	89,075	92,987
Depreciation	35,213	37,214
Total operating expenses	440,059	311,008
Operating Income	38,494	18,341

FINANCIAL HIGHLIGHTS, Continued

(in '000)	2022	2021
Interest income	1,222	1,725
Interest expense	(24,914)	(25,260)
Allowance for funds used during construction	123	826
Other expense, net	(1,552)	12,596
Change in net position	**$ 13,373**	**$ 8,228**

Operating Revenues

The operating revenue increased by $149 million or 45.3% in 2022 compared to 2021. This increase is mainly due to increased global fuel prices due to the war in Ukraine.

Electric Sales Information

	2018	2019	2020	2021	2022
Peak Demand (MW)	254	255	247	257	260
Total Electric Sales (MWh)	1,567,052	1,568,286	1,523,579	1,554,962	1,540,160
Sales Growth (%)	(2.7)	0.1	(2.9)	2.1	(1.0)
Total Customers	51,372	51,977	51,771	52,825	52,873

Energy sales decreased slightly by 1.0% in 2022 compared to 2021. In February 2022, Russia invaded Ukraine, causing soaring fuel prices globally. Due to the increase in fuel prices, LEAC increased gradually. On September 30, 2022, GPA had an under-recovery of fuel cost of $39.6 million.

Operating and Maintenance

GPA’s operating and maintenance expense decrease in 2022 compared to 2021 mainly due to pension and OPEB valuation.

GPA’s headcount for 2022 and 2021 was 412 and 426, respectively. The decrease is largely due to employee retirement.

Station use in 2022 of 63,158 mWh decreased compared to 2021 station use of 67,303 mWh.

Transmission and distribution (T&D) line loss decreased to 89,219 mWh in 2022 compared to 89,880 mWh in 2021.

FINANCIAL HIGHLIGHTS, continued

Depreciation and Amortization

Depreciation and amortization expenses for 2022 decreased by $2 million compared to 2021. The decrease is due to a certain class of assets being fully depreciated.

Utility Cost Recovery Activities

Production Fuel

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

In line with GPA IRP to increase its renewable resources, GPA procured a power purchase agreement for a utility-scale solar farm of 25MW located in southern Guam. The system became available to the grid in August 2015. Under the phase II renewable project, GPA awarded two 60MW of utility-scale solar farms. This project included batteries to mitigate the sudden drop or increase in production due to electrical or atmospheric conditions like rain. GPA signed the contracts in 2018. 60MW solar project from KEPCO became fully operational in June 2022. The other 60MW project is under development.

In addition, GPA commissioned a 275kW wind project, which became operational in March 2016. The $2 million wind project was funded by USDOI Grant. It provided valuable experience and data on the potential of renewable wind projects.

For the Phase III renewable project, where GPA will be utilizing a 30-year lease of Navy property for 35MW solar PV, the bid was under protest; however, the Office of Public Accountability (OPA) and the court found the case in favor of GPA. Due to the change in global affairs, the US Navy elected to use the leased land for military purposes.

Interest Income, Interest Expense, and Other Income and Expenses

Interest income decreased in 2022 compared to 2021 due to a decline in investments.

Interest expense decreased in 2022 compared to 2021 due to lower outstanding bonds and refunding of Revenue Bonds 2012 Series A.

FINANCIAL HIGHLIGHTS, continued

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 for 2022 and 2021 are as follows:

(in millions)	2022	2021
Cash received from customers	$ 457.0	$ 323.4
Cash payments to suppliers	(404.1)	(246.5)
Cash payments to employees for services	(41.4)	(44.7)
Cash payments to retiree benefits	(4.3)	(4.0)
Net cash provided by operating activities	**$ 7.2**	**$ 28.2**

Capital Activities

GPA's capital activities primarily consist of new construction and the replacement of facilities necessary to deliver safe and reliable power to its customers.

The largest capital cost incurred in 2022 were Piti 8 & 9 diesel conversion ($14M), rehabilitation of fuel storage tank ($6M), diesel fuel pipeline ($2M), substation and transmission improvements ($0.7M), and physical security ($1.1M).

Cash used in capital activities includes proceeds from bonds and revenue funds. Please refer to Note 11 to the financial statements for details of GPA's capital activities.

Investing Activities

GPA's cash flows from investing activities for 2022 and 2021 are as follows (in millions):

	2022	2021
Net cash provided by (used in) investing activities	$24.4	$(0.4)

FINANCIAL HIGHLIGHTS, continued

Borrowing Activities

No new borrowing was done in 2022 and 2021; however, Revenue Bonds 2012 Series A was refunded in July 2022. Please refer to Note 6 to the financial statements for details of GPA's borrowing activities.

GPA's cash flows from the capital and non-capital financing activities for 2022 and 2021 are as follows (in millions):

	2022	2021
Net cash provided by non-capital financing activities	$ 2.2	$ 15.0
Net cash used in capital and related financing activities	$(93.5)	$(94.7)

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 cost-effectively depends on 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	Stable

Future Capital Activities

GPA is committed to renewable energy and the reduction of greenhouse gas emissions. GPA invested in a utility-scale solar farm of 25MW which became operational in 2015. GPA will add 120MW of solar PV as part of phase II renewable project. 60 MW of the 120 MW became operational in June 2022. The remaining 60MW is under development. Phase III project was terminated due to the long delay from the bid protest and the US Navy repurposing the land for military operations. Phase IV project is in the process of adding 180MW of renewable energy.

Investing in solar farms and increasing net metering customers (NEM) has led to a grid 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 it is also due to generation output from non-GPA sources.

FINANCIAL HIGHLIGHTS, continued

Future Capital Activities, continued

GPA is required to absorb all the power fluctuation emitted by Dandan solar farm and NEM customers. KEPCO 60MW solar farm has batteries to mitigate the fluctuations of solar production.

The 40 MW ESS system became fully operational on March 1, 2021. The system will eliminate over 70% of short-duration outages due to generator and renewable intermittency trips.

In 2016, CCU and PUC approved to procuring 198MW dual-fire combined cycle combustion turbine. The project was awarded to KEPCO and is planned to be operational in 2024.

Future Borrowing

Despite the advancement of renewable energy and storage, traditional power generation is still required. In 2016, GPA filed an integrated resource plan (IRP) to the CCU and the PUC for the construction of combined cycle combustion turbine plants. Approval was given by the CCU and the PUC to authorize GPA to proceed with the procurement of new power generation. The plan for the procurement model was independent power purchase agreement (IPP) where the IPP finances the construction of the plant.

On November 5, 2019, GPA entered into an energy conversion agreement with Guam Ukudu Power, LLC for the new generation. The agreed capacity was 198 MW using Ultra Low Sulfur Diesel and eventually moving to Liquefied Natural Gas (LNG).

The upcoming Phase IV renewables project will require hardening of the grid. Therefore, GPA applied for grants under Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA).

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, 2021, and 2020 is set forth in GPA's report on the audit of financial statements which is dated March 30, 2022. That Discussion and Analysis explains in more detail major factors impacting the 2021 and 2020 financial statements. A copy of that report can be obtained by contacting the CFO office at (671) 648-3162 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)

Statement of Net Position

		September 30, 2022
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
Current assets:		
Cash and cash equivalents - restricted	$	74,415,490
Cash and cash equivalents - unrestricted		65,891,124
Total cash and cash equivalents		140,306,614
Certificates of deposit - restricted		1,818,139
Investments - restricted		18,563,264
Accounts receivable, net		63,207,370
Materials and supplies inventory, net		13,245,854
Fuel inventory		62,282,916
Prepaid expenses and other current assets		5,680,425
Total current assets		305,104,582
Utility plant, at cost:		
Depreciable utility plant, net of accumulated depreciation		441,827,507
Non-depreciable utility plant		33,196,510
Total utility plant		475,024,017
Lease asset		16,979,263
Other non-current assets:		
Cash and cash equivalents - restricted		2,103,381
Investments - restricted		8,684,754
Unamortized debt issuance costs		462,297
Total other non-current assets		11,250,432
Regulatory assets:		
Unrecovered fuel costs		39,554,794
Total regulatory assets		39,554,794
Total assets		847,913,088
Deferred outflows of resources:		
Unamortized loss on debt refunding		14,716,617
Pension		10,216,119
Other post-employment benefits		41,605,903
Total deferred outflows of resources		66,538,639
	$	914,451,727

Guam Power Authority
(A Component Unit of the Government of Guam)

Statement of Net Position, continued

		September 30, 2022
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION		
Current liabilities:		
Current maturities of long-term debt	$	7,730,000
Accounts payable:		
Operations		14,647,874
Fuel		17,817,974
Accrued payroll and employees' benefits		217,342
Current portion of employees' annual leave		1,836,186
Current portion of lease liability		5,409,970
Interest payable		10,864,975
Customer deposits		10,057,430
Total current liabilities		68,581,751
Long-term debt, net of current maturities		503,873,798
DCRS sick leave liability		1,695,518
Lease liability		11,705,683
Net pension liability		70,467,715
Other post-employment benefits liability		174,910,068
Employees' annual leave, net of current portion		1,723,317
Customer advances for construction		541,501
Total liabilities		833,499,351
Deferred inflows of resources:		
Provision for self-insurance		11,016,513
Pension		10,172,402
Other post-employment benefits		36,596,129
Total deferred inflows of resources		57,785,044
Commitments and contingencies		
Net position:		
Net investment in capital assets		33,053,886
Restricted		14,044,350
Unrestricted		(23,930,904)
Total net position		23,167,332
	$	914,451,727

Guam Power Authority
(A Component Unit of the Government of Guam)

Statement of Revenues, Expenses and Changes in Net Position

	Year Ended September 30, 2022
Revenues:	
Sales of electricity	$ 473,560,717
Miscellaneous	6,215,215
	479,775,932
Bad debts expense	(1,223,004)
Net operating revenues	478,552,928
Operating and maintenance expenses:	
Production fuel	315,770,815
Other production	19,752,167
	335,522,982
Administrative and general	38,936,872
Depreciation and amortization	35,212,942
Transmission and distribution	13,690,327
Energy conversion costs	9,355,771
Customer accounting	7,340,160
Total operating and maintenance expenses	440,059,054
Operating income	38,493,874
Non-operating revenues (expense):	
Allowance for funds used during construction	123,087
Operating grants from the United States Government	993,911
Interest income	1,221,732
Interest expense	(24,913,708)
Other expense, net	(2,546,223)
Total non-operating expense, net	(25,121,201)
Change in net position	13,372,673
Net position at beginning of year	9,794,659
Net position at end of year	$ 23,167,332

Guam Power Authority
(A Component Unit of the Government of Guam)

Statement of Fiduciary Net Position

		September 30, 2022
ASSET		
Current asset:		
Cash and cash equivalents	$	205,791
		205,791
LIABILITY AND NET POSITION		
Current liability:		
Accounts payable - operations:	$	205,791
		205,791
Commitments and contingencies		
Net position		---
	$	205,791

Guam Power Authority
(A Component Unit of the Government of Guam)

Statement of Revenues, Expenses and Changes in Fiduciary Net Position

	Year Ended September 30, 2022
Revenues	$ 15,622,809
Operating Expenses	15,622,809
Change in net position	---
Net position at beginning of year	---
Net position at end of year	$ ---

Guam Power Authority
(A Component Unit of the Government of Guam)

Statements of Cash Flows

	Year Ended September 30, 2022
Increase (decrease) in cash and cash equivalents	
Cash flows from operating activities:	
Cash received from customers	$ 457,036,346
Cash payments to suppliers for goods and services	(404,116,478)
Cash payments to employees for services	(41,482,553)
Cash payments for retiree benefits	(4,278,162)
Net cash provided by operating activities	7,159,153
Cash flows from investing activities:	
Interest on investments and bank accounts	1,221,732
Increase in certificates of deposit	(3,629)
Decrease in investments	23,185,566
Net cash provided by investing activities	24,403,669
Cash flows from capital and related financing activities:	
Receipts from the U.S. Government capital grant	2,243,911
Principal paid on long-term debt	(49,765,000)
Interest paid on long-term debt	(15,618,230)
Additions to utility plant	(28,149,235)
Net cash used in capital and related financing activities	(91,288,554)
Net change in cash and cash equivalents	(59,725,732)
Cash and cash equivalents at beginning of year	202,135,727
Cash and cash equivalents at end of year	$ 142,409,995

Guam Power Authority
(A Component Unit of the Government of Guam)

Statements of Cash Flows, continued

		Year Ended September 30, 2022
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	$	38,493,874
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation and amortization		35,212,942
Bad debts expense		1,223,004
Other pension expense		(4,109,126)
Other post-employment benefit costs		6,484,764
Lease expense		(74,171)
(Increase) decrease in assets:		
Accounts receivable		(23,844,082)
Materials and supplies inventory		(245,987)
Fuel inventory		(26,048,433)
Prepaid expenses and other current assets		(2,373,036)
Unrecovered fuel costs		(25,386,709)
Increase (decrease) in liabilities:		
Accounts payable		7,310,824
Customer deposits		(28,030)
Customer advances for construction		71,336
Provision for self-insurance		1,061,190
Accrued payroll and employees' benefits		(172,490)
Employees' annual and DCRS sick leave		(416,717)
Net cash provided by operating activities	$	7,159,153

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.

Primary Government Financial Statements

The primary government financial statements consist of the statement of net position, statement of revenues, expenses, and changes in net position and statement of cashflows. Fiduciary activities are not included in the government-wide financial statements.

Fiduciary Fund Financial Statements

Separate financial statements are provided for fiduciary funds. Fiduciary financial statements include assets, liabilities and activities of the Energy Credit Program (the “ECP”), for which GPA has been legally designated to control but GPA itself is not a beneficiary. The ECP was enacted by Public Law No. 36-106 in July 2022 for the Government of Guam to provide each of the GPA residential, master-metered and commercial customers with a $500 credit towards their accounts, to be disbursed $100 per month for the months of July to November 2022. The total sum of $26,381,000 was appropriated from the Government of Guam General Fund for this purpose.

Basis of Accounting

The accounting policies of the primary government financial statements and fiduciary fund financial statements 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.

1. Organization and Summary of Significant Accounting Policies, continued

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.

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 a 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.

1. Organization and Summary of Significant Accounting Policies, continued

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 bad debts expense recorded against operating revenues. Uncollectible accounts are written off against the allowance or are charged against operating revenues 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 $913,542 as of September 30, 2022.

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.

1. Organization and Summary of Significant Accounting Policies, continued

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 Post-Employment 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 a single 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.

Unamortized Debt Issuance Costs

Unamortized debt issuance costs mainly include insurance costs related to the issuance of the Series 2014 and 2022 bonds. These costs are being amortized using the effective interest method over the life of the applicable debt.

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; financing and investing activities, costs and related recoveries from natural disasters, operating grants, 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 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, 2022, GPA has an under recovery of fuel costs of $39,554,794.

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 statements 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 does not have outstanding commodity swap agreements at September 30, 2022.

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 $123,087 was recognized during the year ended September 30, 2022.

Recently Adopted Accounting Pronouncement

In June 2017, GASB issued Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and as inflows of resources or outflows of resources recognized based on the payment provisions of the contract. Upon adoption of this standard, the Authority recorded a right-of-use asset and a lease liability of $21,115,196 at October 1, 2021. As of September 30, 2022, the Authority's right-of-use asset, net of accumulated depreciation and lease liability amounts to $16,979,263 and $17,115,653, respectively.

1. Organization and Summary of Significant Accounting Policies, continued

Upcoming Accounting Pronouncements

In May 2019, GASB issued Statement No. 91, *Conduit debt obligations*. The primary objectives of this statement are to provide a single method reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This statement achieves those objectives by clarifying the existing definition of a conduit obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. GASB Statement No. 91 will be effective for fiscal year ending September 30, 2023.

New Accounting Standards

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs). As used in this Statement, a PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or nongovernmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction. Some PPPs meet the definition of a service concession arrangement (SCA), which the Board defines in this Statement as a PPP in which (1) the operator collects and is compensated by fees from third parties; (2) the transferor determines or has the ability to modify or approve which services the operator is required to provide, to whom the operator is required to provide the services, and the prices or rates that can be charged for the services; and (3) the transferor is entitled to significant residual interest in the service utility of the underlying PPP asset at the end of the arrangement. GASB Statement No. 94 will be effective for fiscal year ending September 30, 2023.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, *Leases*, as amended. GASB Statement No. 96 will be effective for fiscal year ending September 30, 2023.

1. Organization and Summary of Significant Accounting Policies, continued

New Accounting Standards, continued

In April 2022, GASB issued Statement No. 99, *Omnibus 2022*. The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. Consistent authoritative literate enables governments and other stakeholders to locate and apply the correct accounting and financial reporting provisions, which improves the consistency with which such provisions are applied more easily. The comparability of financial statements also will improve as a result of this Statement. Better consistency and comparability improve the usefulness of information for users of local government financial statements. GASB Statement No. 99 will be effective for fiscal year ending September 30, 2023.

In June 2022, GASB issues Statement No. 100, *Accounting Changes an Error Corrections – An Amendment of GASB Statement No. 62*. The primary objective of this Statement is to enhance accounting an financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent and comparable information for making decisions or assessing accountability. The requirements of this Statement will improve the clarity of the accounting and financial reporting requirements for accounting changes and error corrections, which will result in greater consistency in application in practice. In turn, more understandable, reliable, relevant, consistent, and comparable information will be provided to financial statement users for making decisions or assessing accountability. In addition, the display and note disclosure requirements will result in more consistent, decision useful, understandable, and comprehensive information for users about accounting changes and error corrections. GASB Statement No. 100 will be effective for fiscal year ending September 30, 2024.

In June 2022, GASB issued Statement No. 101, *Compensated Absences*. The objective of this Statement is to better meet the information needs of financial statement suers by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. The unified recognition and measurement model in this Statement will result in a liability for compensated absences that more appropriately reflects when a government incurs an obligation. In addition, the model can be applied consistently to any type of compensated absence and will eliminate potential comparability issues between governments that offer different types of leave. The model also will result in a more robust estimate of the amount of compensated absences that a government will pay or settle, which will enhance the relevance and reliability of information about the liability for compensated absences. GASB Statement No. 101 will be effective for fiscal years ending September 30, 2025.

The Authority is currently evaluating the effects the above upcoming accounting pronouncements might have on its financial statements.

2. Cash, Cash Equivalents and Investments

The bond indenture agreements for the 2014, 2017 and 2022 series revenue bonds (note 6) 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.

At September 30, 2022, cash and cash equivalents, certificates of deposit and investments held by trustees and by GPA in these funds and accounts were as follows:

	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	$ 2,103,381	$ ---	$ ---	$ 2,103,381	$ ---	$ ---	$ 2,103,381
Interest and principal funds	7,897,398	---	---	7,897,398	8,684,754	---	16,582,152
Working capital funds	10,083,122	---	---	10,083,122	4,821,264	---	14,904,386
Bond reserve fund	34,269,361	---	---	34,269,361	13,742,000	---	48,011,361
Self-insurance fund	---	9,636,149	---	9,636,149	---	---	9,636,149
Revenue funds	5,127,133	---	---	5,127,133	---	---	5,127,133
Energy sense fund	---	3,200,040	---	3,200,040	---	---	3,200,040
Operating funds	---	---	65,891,124	65,891,124	---	---	65,891,124
Surplus funds	6,020,426	---	---	6,020,426	---	---	6,020,426
	$65,500,821	$12,836,189	$65,891,124	$144,228,134	$27,248,018	$ ---	$171,476,152

At September 30, 2022, the operating funds include the remaining insurance proceeds of $57,985,381 recovered 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.

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.

2. Cash, Cash Equivalents and Investments, continued

As of September 30, 2022, the carrying amount of GPA's total cash and cash equivalents and certificates of deposit was $144,228,134, and the corresponding bank balances were $144,772,831. Of the bank balance amount as of September 30, 2022, $75,890,094 was maintained in financial institutions subject to Federal Deposit Insurance Corporation (FDIC) insurance. As of September 30, 2022, bank deposits in the amount of $768,702 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, 2022, $77,447,529 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, 2022 also include $65,500,821, 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, 2022, GPA's investments were as follows:

	Amount	Maturity	S&P or Moody's Rating
Current:			
Investments held by trustee – restricted:			
Bond Reserve Fund:			
Banco Santander SA (commercial paper)	$13,742,000	More than a year	Not rated
Bond Fund:			
Federated Government Ultrashort Duration Fund (mutual fund)	4,821,264	Less than 1 year	Not rated
	$18,563,264		
Noncurrent:			
Investments held by trustee - restricted:			
Bond Fund:			
Bayerische Landesbank Guaranteed Investment Certificate (GIC)	$ 8,684,754	More than 10 years	Aa3

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.

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, 2022, each of GPA's investments exceeded 5% of total investments.

2. Cash, Cash Equivalents and Investments, continued

B. Investments, continued

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, 2022, investments in Federated Government Ultrashort Duration Fund (mutual fund) are valued using Level 1 inputs.

3. Receivables

Accounts receivable at September 30, 2022 were summarized as follows:

Customers:	
Private	$43,574,885
Government	13,634,441
	57,209,326
U.S. Government - Navy (note 8)	8,259,566
U.S. Government - grants	752,095
Others	2,532,413
	68,753,400
Less allowance for doubtful receivables	(5,546,030)
	$63,207,370

Unbilled accounts receivable included in the accounts receivable – private customers amounted to $13,079,865 at September 30, 2022.

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. 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, and prior to January 1, 2018, 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, retirees under the DB Plan and DCRS Plan who retired prior to September 30, 2020 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.

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.

4. 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 retirees 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 and DCRS retirees 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 Guam Retirement Security Plan (GRSP). On February 4, 2020, the Guam Legislature terminated the GRSP. Commencing April 1, 2017, eligible employees elected, during the “election window”, to participate in the DB 1.75 Plan with an effective date of January 1, 2018.

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 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. Benefits are fully vested upon attaining 5 years of credited service.

4. Pensions, continued

A. General Information About the Pension Plans, Continued

Members of the DB 1.75 Plan may retire at age 62 with 5 years of credited service, or at age 60 with 5 years of credited service without survivor benefits, or at age 55 with 25 years of credited service but the retirement annuity shall be reduced by ½ of 1% for each month that the age of the member is less than 62 years (6% per year). Credited service is earned for each year of actual employment by the member as an employee. Upon retirement, a retired member is entitled to a basic retirement annuity equal to an annual payment of 1.75% of average annual salary multiplied by years of credited service. Average annual salary means the average of annual base salary for the three years of service that produce the highest average.

Contributions and Funding Policy: Plan members of the DB Plan are required to contribute a certain percentage of their annual covered salary. The contribution requirements of the plan members and GWA are established and may be amended by the GGRF.

The Authority's statutory contribution rates were 28.32% for the year ended September 30, 2022. Employees are required to contribute 9.5% of their annual pay for the year ended September 30, 2022.

GPA's contributions to the DB Plan for the years ended September 30, 2022 and 2021 were $4,757,986 and $4,854,376, 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, 2022 and 2021 were $1,270,531 and $1,266,979, 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 6.2% 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 years ended September 30, 2022 and 2021 are determined using the same rates as the DB Plan. Of the amount contributed by the employer, only 6.2% 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.

4. Pensions, continued

A. General Information About the Pension Plans, Continued

GPA's contributions to the DCRS Plan for the years ended September 30, 2022 and 2021 were $2,716,497 and $2,397,280, respectively, which were equal to the required contributions for the respective years then ended. Of these amounts $2,120,703 and $1,845,643 were or will be contributed toward the unfunded liability of the DB Plan for the years ended September 30, 2022, and 2021, respectively.

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

Pension Liability: At September 30, 2022, GPA reported a net pension liability for its proportionate share of the net pension liabilities measured as of September 30, 2021, which is comprised of the following:

Defined Benefit Plan	$51,163,877
Ad Hoc COLA/supplemental annuity Plan for DB retirees	15,888,333
Ad Hoc COLA Plan for DCRS retirees	3,415,505
	$70,467,715

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, 2022, GPA's proportionate shares of the GovGuam net pension liabilities were as follows:

Defined Benefit Plan	5.31%
Ad Hoc COLA/supplemental annuity Plan for DB retirees	5.15%
Ad Hoc COLA Plan for DCRS retirees	4.84%

Pension Expense: For the year ended September 30, 2022, GPA recognized pension expense for its proportionate share of plan pension expense from the above pension plans as follows:

Defined Benefit Plan	$2,871,351
Ad Hoc COLA/supplemental annuity Plan for DB retirees	1,321,730
Ad Hoc COLA Plan for DCRS retirees	312,635
	$4,505,716

4. 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, 2022, GPA reported total deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Supplemental Annuity Defined Benefit Plan		Ad Hoc COLA 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	$ 82,121	$ 520,227	$ ---	$220,725	$ 375,612	$ 66,512
Net difference between projected and actual earnings on pension plan investments	---	6,180,566	---	---	---	---
Changes of assumptions	---	---	432,934	47,113	693,742	225,286
Contributions subsequent to the measurement date	6,878,689	---	1,152,531	---	118,000	---
Changes in proportion and difference between GPA contributions and proportionate share of contributions	223,868	2,271,436	145,274	15,629	113,348	624,908
	$7,184,678	$8,972,229	$1,730,739	$283,467	$1,300,702	$916,706

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, 2022 will be recognized in pension (expense) income as follows:

Year Ending September 30,	Defined Benefit Plan	Ad Hoc COLA/ Supplemental Annuity Plan for DB Retirees	Ad Hoc COLA Plan for DCR Retirees	Total
2023	$(2,276,655)	$ 354,743	$ 21,933	$(1,899,979)
2024	(1,972,257)	(53,180)	21,933	(2,003,504)
2025	(1,907,435)	(6,822)	21,933	(1,892,324)
2026	(2,509,893)	---	21,933	(2,487,960)
2027	---	---	21,933	21,933
Thereafter	---	---	156,331	156,331
	$(8,666,240)	$294,741	$265,996	$(8,105,503)

4. Pensions, continued

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

Actuarial Assumptions: The actuarial assumptions used are based upon recommendations from the actuarial experience study for the period October 1, 2011 through September 30, 2015. A summary of actuarial assumptions applied to all periods included in the measurement is shown below.

Actuarial cost method:	Entry age normal
Total payroll growth:	2.75%
Salary increases:	Graduated based on service with the GovGuam ranging from 4.0% for service in excess of 15 years to 7.5% for service from zero to five years.
Disability:	1974-78 SOA LTD Non-Jumbo, with rates reduced by 50% for males and 75% for females.
Retirement age:	5% per year from age 55 to 64, 10% per year from age 65 to 74, 100% at age 75.
Mortality:	Based on the RP-2000 combined mortality table, set forward 3 years for males and 2 years for females.
Amortization method:	Level percentage of payroll, closed.

Expected Rate of Return and Asset Allocation: The Fund has a target asset allocation based on the investment policy adopted by the GGRF Board of Trustees. The target allocation and best estimates of the expected nominal return for each major asset class are summarized as follows:

Asset Class	Target Allocation	Nominal Return
U.S. Equities (large cap)	26.0%	7.44%
U.S. Equities (small cap)	4.0%	9.23%
Non-U.S. Equities	17.0%	9.28%
Non-U.S. Equities (emerging markets)	3.0%	11.32%
U.S. Fixed Income (aggregate)	22.0%	3.89%
Risk Parity	8.0%	5.92%
High Yield Bonds	8.0%	6.42%
Global Real Estate (REITs)	2.5%	8.55%
Global Equity	7.0%	8.20%
Global Infrastructure	2.5%	7.58%

4. Pensions, continued

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

Discount Rate: The discount rate used to measure the total pension liability for the DB Plan was 7.0%, 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 was 2.26%, 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:

Defined Benefit Plan:

	1% Decrease in Discount Rate 6%	Current Discount Rate 7.0%	1% Increase in Discount Rate 8%
Net Pension Liability	$64,601,110	$51,163,877	$34,521,432

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees:

	1% Decrease in Discount Rate 1.26%	Current Discount Rate 2.26%	1% Increase in Discount Rate 3.26%
Net Pension Liability	$17,424,011	$15,888,333	$14,547,691

Ad Hoc COLA Plan for DCRS Retirees:

	1% Decrease in Discount Rate 1.26%	Current Discount Rate 2.26%	1% Increase in Discount Rate 3.26%
Net Pension Liability	$3,877,285	$3,415,505	$3,021,534

C. Payables to the Pension Plans:

As of September 30, 2022, GPA has no payables to GGRF relating to unremitted statutorily required contributions.

5. Other Post-Employment Benefits (OPEB)

GPA participates in the retiree health care benefits program. GovGuam's Department of Administration is responsible for administering the GovGuam Group Health Insurance Program, which provides medical, dental, and life insurance benefits to retirees, spouses, children and survivors. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit only. The program covers retirees and is considered an OPEB plan.

A. General Information About the OPEB Plan

Plan Description: The OPEB plan is a single-employer defined benefit plan that 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. GovGuam issues a publicly available financial report that includes financial statements and required supplementary information for the OPEB Plan. That report may be obtained by writing to the Government of Guam Department of Administration, Suite 224, 2nd Floor, ITC Building, 590 South Marine Corps Drive, or by visiting the Guam Department of Administration website – https://da.doa.guam.gov/reports/guam-other-post-employment-benefits-opeb-reports/.

Benefits: GovGuam provides postemployment medical, dental and life insurance benefits to retirees, spouses, children and survivors. Active employees and retirees who waive medical and dental coverage are considered eligible for the life insurance benefit 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, 2022, GPA reimbursed GovGuam $2,859,663 for its share of the costs of the above mentioned Plan, which were equal to the statutorily required contributions.

B. Total OPEB Liability

Total OPEB liability at the fiscal year presented for the OPEB Plan was measured on and was determined by actuarial valuations as of the following dates:

Reporting date:	September 30, 2022
Measurement date:	September 30, 2021
Valuation date:	September 30, 2020

Total OPEB liability as of September 30, 2022 is $174,910,068.

5. Other Post-Employment Benefits (OPEB), continued

Proportionate share of total OPEB liability at September 30, 2022 is 6.31%.

B. Total OPEB Liability, Continued

Actuarial Assumptions: A summary of actuarial assumptions applied to all periods included in the measurement is shown below:

Inflation:	2.75%
Healthcare cost trend rate:	6 percent for 2021 through 2023, decreasing 0.25 percent per year to an ultimate rate of 4.25 percent for 2030 and later years.
Dental trend rates:	4.25% per year, based on a blend of historical retiree premium rate increases as well as observed U.S. national trends.
Healthy retiree mortality rates:	Head-count weighted PUB-2010 Table, set forward 4 years for males and 2 years for females, respectively, projected generationally using 50% of MP-2020.
Disabled retiree mortality rates:	UB-2010 Disabled Retiree Amount Weighted mortality table set forward 4 years for males and 2 years for females, respectively, using 130% of the rates before age 80 and projected generationally from 2010 using 50% of mortality improvement scale MP-2020.

Discount rate: The discount rate used to measure the total OPEB liability was 2.26% as of September 30, 2022. 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 2.26% municipal bond rate as of September 30, was applied to all periods to determine the total OPEB liability.

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.

5. Other Post-Employment Benefits (OPEB), continued

C. Changes in the Total OPEB Liability

Changes in GPA's proportionate share of the total OPEB liability for the year ended September 30, 2022 are as follows:

At October 1	$160,364,667
Changes for the year:	
Service cost	4,322,457
Interest	3,609,190
Change in proportionate share	72,207
Differences between expected and actual experience	4,633,265
Change of assumptions	4,659,031
Benefit payments	(2,750,749)
Net change	14,545,401
At September 30	$174,910,068

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 (2.26%) in measuring the OPEB liability.

	1% Decrease in Discount Rate 1.26%	Current Discount Rate 2.26%	1% Increase in Discount Rate 3.26%
OPEB Liability	$201,125,401	$174,910,068	$144,944,701

Healthcare Cost Trend Rate Sensitivity Analysis: The following schedule presents the sensitivity of the total OPEB liability to changes in the healthcare cost trend rate. The sensitivity analysis 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 in measuring the OPEB liability.

	1% Decrease	Healthcare Cost Trend Rates	1% Increase
OPEB Liability	$140,605,041	$174,910,068	$208,119,388

5. Other Post-Employment Benefits (OPEB), continued

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

For the year ended September 30, 2022, GPA recognized OPEB expense of $6,602,076, for its proportionate share of the GovGuam total OPEB expense. At September 30, 2022, GPA reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	$20,421,733	$24,593,118
Difference between expected and actual experience	15,241,730	9,290,905
Contributions subsequent to the measurement date	2,859,663	---
Changes in proportion and difference between GPA contributions and proportionate share of contributions	3,082,777	2,712,106
	$41,605,903	$36,596,129

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, 2022 will be recognized in OPEB (expense) income as follows:

Year Ending September 30,	
2023	$(3,313,730)
2024	2,053,622
2025	2,952,253
2026	96,502
2027	361,464
	$(2,150,111)

6. Noncurrent Liabilities

A. Long-term Debt

Long-term debt at September 30, 2022 is as follows:

2022 Series Revenue Refunding Bonds, initial face value of $257,570,000 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 $5,740,000 in October 2022, increasing to a final payment of $21,940,000 in October 2044.	$257,570,000
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.	148,355,000
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.	69,225,000
Total long-term debt	475,150,000
Less current maturities	(7,730,000)
	467,420,000
Add premium on bonds	36,453,798
Total bonds	$503,873,798

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. 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, and pay costs of issuance.

6. Noncurrent Liabilities, continued

A. Long-term Debt, continued

Proceeds of the 2022 Series Revenue Refunding Bonds were used to refund GPA's 2012 Series Senior Revenue Bonds and to pay costs of issuance. The 2012 Series Senior Revenue Bonds were used to refund GPA's 1993 and 1999 Senior Bonds.

All gross revenues have been pledged to repay the bonds principal and interest. For the year ended September 30, 2022, the debt service for the series bonds was $28,708,858, or approximately 6% of pledged gross revenues.

Premium associated with the bonds at September 30, 2022 are being amortized on the effective interest method over the life of the applicable debt.

As of September 30, 2022, future maturities of long-term debt are as follows:

Year Ending September 30,	Principal	Interest	Total Debt Service
2023	$ 7,730,000	$ 20,079,983	$ 27,809,983
2024	24,680,000	22,704,000	47,384,000
2025	15,855,000	21,690,625	37,545,625
2026	16,650,000	20,878,000	37,528,000
2027	17,480,000	20,024,750	37,504,750
2028 through 2032	101,425,000	85,754,875	187,179,875
2033 through 2037	109,320,000	58,026,500	167,346,500
2038 through 2042	105,370,000	32,612,600	137,982,600
2043 through 2045	76,640,000	5,275,650	81,915,650
	$475,150,000	$287,046,983	$762,196,983

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.

6. Noncurrent Liabilities, continued

A. Long-term Debt, continued

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. 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.

In July 2022, GPA refunded its 2012 Series bonds through the issuance of the 2022 Series bonds. At the time of refunding, the 2012 Series bonds had a principal balance outstanding of $285,795,000. 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 2012 Series bonds. The advance refunding met the requirements of an in-substance defeasance and the 2012 bonds were removed from GPA's financial statements. The advance refunding resulted in a loss on defeasance totaling $2,224,524 representing the difference between the reacquisition price and the carrying amount of the 2012 bonds. Although the advance refunding resulted in the recognition of an accounting loss, GPA in effect reduced its aggregate debt service payments by $43,135,796 over the next twenty-three years and obtained an economic gain (difference between the present values of the old debt and the new debt service payments) of $5,772,263.

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. As of September 30, 2022, the unamortized balance of the loss on refunding of the 1993 and 1999 Series bonds and 2010 Series bonds is $1,898,175 and $12,818,442, respectively.

6. Noncurrent Liabilities, continued

A. Long-term Debt, continued

At September 30, 2022, bonds outstanding of $535,815,000 is considered defeased.

All of GPA's outstanding bonds are public offerings sold through competitive sale. GPA has no direct borrowings.

Changes in GPA's long-term debt for the year ended September 30, 2022 are as follows:

	Outstanding October 1, 2021	Increases	Decreases	Outstanding September 30, 2022	Current
Long-term debt:					
2012 Series Senior bonds	$305,740,000	$ ---	$(305,740,000)	$ ---	$ ---
2014 Series Senior bonds	70,820,000	---	(1,595,000)	69,225,000	1,675,000
2017 Series Senior bonds	148,355,000	---	---	148,355,000	315,000
2022 Series Senior bonds	---	257,570,000	---	257,570,000	5,740,000
Unamortized premium on bonds	31,905,390	18,474,929	(13,926,521)	36,453,798	---
	$556,820,390	$276,044,929	$(321,261,521)	$511,603,798	$7,730,000

Bond Covenants

The Indenture, dated December 1, 1992, as subsequently amended and supplemented by Supplemental Indentures, sets forth the establishment of accounts, the application of revenues, and certain other covenants to ensure payment of debt service. Management believes GPA was in compliance with all bond covenants as of and for the years ended September 30, 2022. The primary requirements of the Indenture are summarized below:

Rate Covenant - GPA has covenanted to at all times to establish, fix, prescribe and collect rates and charges for the sale or use of electric energy produced, transmitted, distributed or furnished from the system so as to yield, with respect to the then immediately following twelve months, net revenues equal to at least 1.30 times of the annual debt service. Net revenues are defined as all revenues received during the period less maintenance and operation expenses incurred during such period.

Revenue Fund – The Indenture requires GPA to deposit all revenues upon receipt in the revenue fund. Amounts in the revenue fund are to be used to pay budgeted maintenance and operation expenses and transfer the remaining moneys to different fund accounts.

Working Capital Requirement – Working capital refers to the amount of cash GPA maintains at any given time to pay for its operations. GPA must maintain a balance in such account equal to one-twelfth of the budgeted maintenance and operation expenses for the then current fiscal year.

6. Noncurrent Liabilities, continued

A. Long-term Debt, continued

Bond Covenants, continued

Bond Fund - the Indenture created the Bond Fund solely for the purposes of: (1) paying interest on the Senior Bonds when due and payable; (2) paying principal of the Serial Senior Bonds when due and payable; and (3) purchasing and redeeming or paying at maturity the Term Senior Bonds.

Bond Reserve Fund - the Indenture created a Bond Reserve Fund available for the purpose of paying debt service on Bonds in the event of a deficiency in the Bond Fund. GPA is required to maintain an amount within the Bond Reserve Fund equal to the maximum annual debt service for the then current or future fiscal year on all outstanding bonds.

Events of default with finance related consequences - the Indenture specifies a number of Events of Default and related remedies. In the event that the amount in any Fund or Account is insufficient for the purposes for which such Fund or Account was established, the Trustee shall transfer such amount as is necessary to satisfy such deficiency. If an event of default continues, the Trustee is entitled, and if requested to do so by the Bondholders, to declare the principal and accrued interest to be due and payable immediately upon notice in writing to GPA.

Acceleration - the remedies granted to the Trustee and the Bondholders under the Indenture do not include any right to accelerate the payment of the outstanding bonds. The Trustee is authorized to take certain actions upon the occurrence of an event of default, including proceedings to enforce the rights of Bondholders as outlined in the Indenture.

B. Other Long-term Liabilities

Changes in other long-term liabilities in fiscal year 2022 were as follows:

	Outstanding October 1, 2021	Increases	Decreases	Outstanding September 30, 2022	Current
Others:					
DCRS sick leave liability	$ 1,695,518	$ ---	$ ---	$ 1,695,518	$ ---
Employees' annual leave	3,976,220	---	(416,717)	3,559,503	1,836,186
Lease liabilities	21,115,196	---	(3,999,543)	17,115,653	5,409,970
Net pension liability	88,431,082	---	(17,963,367)	70,467,715	---
OPEB liability	160,364,667	3,581,340	---	163,946,007	---
Customer advances for construction	470,165	71,336	---	541,501	---
	$276,052,848	$3,652,676	$(22,379,627)	$257,325,897	$7,246,156

7. Leases

Leased assets at September 30, 2022 consists of the following:

Lease Description	Classification	Gross Balance	Accumulated Amortization	Net Balance
Fuel Storage	Fuel Storage	$19,870,827	$3,830,456	$16,040,372
Ground lease	Land	563,486	93,914	469,572
Copier equipment	Equipment	401,779	150,667	251,112
Office building	Building	279,104	60,896	218,208
		$21,115,196	$4,135,933	$16,979,263

The following represent significant leases included in the fuel storage category:

- 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. In July 2022, the lease was extended until August 2025.
- A lease agreement for the use of pipelines effective September 1, 2013. The contract includes fixed annual fees escalating at a certain percentage every year until August 31, 2022. In July 2022, the lease was extended until August 2025.
- A lease agreement for additional fuel storage tank effective January 1, 2018. The contract includes fixed annual fees every year until December 31, 2022, with the option to extend the lease term up to June 2026.
- A lease agreement for additional fuel storage tank effective July 1, 2022. The contract includes fixed annual fees every year until June 30, 2023, with the option to extend the lease term up to June 2026.

GPA recorded the related right-of-use assets at cost of $21,115,196, less accumulated amortization of $4,135,933 as of September 30, 2022.

The future lease payments for the aforementioned agreements are as follows:

Year ending September 30,	Principal	Interest	Total
2023	$ 5,409,970	$299,859	$ 5,709,829
2024	4,922,204	197,606	5,119,810
2025	4,802,469	100,578	4,903,047
2026	1,880,763	22,437	1,903,200
2027	100,247	1,992	102,239
	$17,115,653	$622,472	$17,738,125

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.

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 year ended September 30, 2022, GPA billed the Navy $87,300,333, for sales of electricity under the USC. Receivables from the Navy were $8,259,566 at September 30, 2022.

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. On August 26, 2020, GPA and the Navy executed their first task under the BOA. However, no costs have been incurred as of September 30, 2022.

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 November 2019, GPA entered into diesel fuel supply contracts with IP&E Guam, Inc. and Mobil Oil Guam, Inc. The agreements are for two years beginning January 1, 2020 with an option to extend for three years, renewable annually. On September 30, 2022, GPA extended the contract until September 30, 2023.

9. Commitments and Contingencies, continued

Fuel Purchase Contracts, continued

In September 2020, GPA entered into residual fuel oil (RFO) supply contract with Hyundai Corporation. The agreement is for three years commencing on or about September 1, 2020 until August 31, 2023 with the options to extend for two (2) additional one (1) year terms, upon mutual agreement of both parties. The minimum purchase under the contract is estimated at 1,000,000 barrels per year with a maximum purchase of 2,000,000 barrels per year of combined quantities.

Performance Management Contracts

GPA entered into a Performance Management Contract (PMC) for the operation and maintenance of the Cabras 1 and 2 generators, effective on October 1, 2010, for a period of five years with an option to extend for another five-year term, which expired on September 2020. Fees under the PMC are subject to certain incentives and penalties, as agreed by both parties. On July 30, 2020, the Guam PUC approved GPA's petition to award the bid to Taiwan Electrical and Mechanical Engineering Services, Inc. (TEMES) for the base period total cost of $9,969,188 for three years with an option to extend up to two additional one-year terms.

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. The first three-year term extension was exercised and the PMC is expiring on February 28, 2026.

At September 30, 2022, the minimum future fixed management fees are as follows:

Year Ending September 30,	Amount
2023	$2,842,893
2024	2,928,180
2025	3,016,025
2026	363,003
	$9,150,101

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, with an option to extend the contract for three additional one-year terms. The extensions have been exercised and at September 30, 2022, the minimum future management fees for the year ending September 30, 2023 is $1,118,000.

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, 2022, the minimum future renewable energy purchases are as follows:

Year Ending September 30,	Amount
2023	$ 9,196,204
2024	9,163,847
2025	9,209,954
2026	9,242,026
2027	9,274,210
2028 through 2032	36,781,512
2033 through 2037	46,519,297
2038 through 2041	38,321,837
	$167,708,887

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.

Energy Conversion Agreement

In January 2019, ownership of a power plant under an energy conversion agreement 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. The operation and maintenance fees are calculated based on factors stated in the agreement and paid on a monthly basis. GPA also pays a monthly recapitalization fee of $305,265 consisting of payments for capital and performance improvement projects, operations and maintenance fees, 4% cost of money and 10% contingency. The total recapitalization fees paid during year ended September 30, 2022 were $3,663,180, of which $4,438,322, were prepaid. Of the total amount, $1,199,014, was for capital projects which were recorded in utility plant assets for the year ended September 30, 2022. The remaining amount was unspent and is included in prepaid expenses and other current assets in the accompanying statements of net position as of September 30, 2022.

9. Commitments and Contingencies, continued

Energy Conversion Agreement, continued

At September 30, 2022, the future recapitalization fees are as follows:

2023	$3,663,180
2024	1,221,060
	$4,884,240

Capital Commitments

As of September 30, 2022, GPA has various on-going construction contracts with a total contract price of $35.5 million, of which $26.6 million is recorded in construction work in progress.

Self-Insurance

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

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.

In July 2021, CCU approved a $10 million drawdown from the self-insurance used for partial settlement of fuel cost, resulting in the fund balance to fall to less than $18 million, which is the threshold for surcharge reactivation. The insurance surcharge was reactivated effective August 1, 2021.

The self-insurance fund, included in restricted cash and cash equivalents held by GPA, was $9,636,149 at September 30, 2022.

Litigation

GPA has several asserted and unasserted claims outstanding as of September 30, 2022. 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.

9. Commitments and Contingencies, continued

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 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. The Cabras 3 and 4 power plants are no longer subject to compliance due to an explosion and fire in August 2015.

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 required by 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 with the other units subjected to RICE MACT and EGU MACT, GPA and EPA entered 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 early February 2020, EPA and GPA signed the consent decree. The US District Court approved the consent decree on April 20, 2020 and this approval shall constitute the final judgement to GPA. Management is in the process of working through the objectives and requirements set forth by the consent decree. Because of the COVID-19 pandemic, GPA has encountered delays in completing some of the objectives set forth in the consent decree. On January 14, 2022, the US District Court approved certain modifications of the consent decree most of which pertain to the schedules for implementing the injunctive relief required by the decree. The consent decree requires monetary penalties for not accomplishing the various objectives by the required dates. Some of the objectives of the consent decree follow:

a. permanently retire Cabras 1 and 2 units by October 31, 2024.
b. bring the MEC 8 and 9 units into compliance by switching from residual fuel oil to ultra-low sulfur diesel oil and installing oxidation catalysts by July 31, 2022.
c. construct a new power plant that will comply with the requirements of Clean Air Act to be activated by April 30, 2024.
d. pay a sum of $400,000 as a civil penalty. This penalty was settled on May 1, 2020.

9. Commitments and Contingencies, continued

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 were no invoices received for the year ended September 30, 2022. 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, 2022 and therefore, no liability or other impact has been recognized in the accompanying financial statements.

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, 2022, 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.

9. Commitments and Contingencies, continued

Integrated Resource Plan

In 2012, GPA developed its Integrated Resource Plan (IRP). The objectives of the IRP are primarily 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; adding 40-45 MW of generation from renewable energy sources; and diversification of its fuel source to LNG and ULS diesel fuel.

In August 2015, GPA lost 78 MW 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 and in October 2019, the PUC approved the energy conversion agreement for a 198 MW power plant build, own/operate and transfer contract. The PUC Order, however, does not include the authorization or approval for any use of LNG as a fuel source for the new plant.

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. As of September 30, 2022, GPA has no legal or contractual obligation to perform these actions when they retire their assets; therefore, no provision for this potential cost has been recorded in the accompanying financial statements.

10. Related Party Transactions and Balances

During the year ended September 30, 2022, GPA billed GovGuam agencies $62,802,060 for sales of electricity. Receivables from GovGuam agencies were $13,634,441 at September 30, 2022 (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 year ended September 30, 2022 were $18,577,820. Outstanding receivables were $2,216,820 at September 30, 2022, which are included in the GovGuam agencies receivable mentioned above.

10. 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 $105,680 for the year ended September 30, 2022. Outstanding receivables totaled $195,990 at September 30, 2022, 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 $593,428 for the years ended September 30, 2022. Outstanding receivables were $37,039 at September 30, 2022, and were included in other receivables (see note 3).

GWA billed GPA for water and sewer charges totaling $2,004,944 for the year ended September 30, 2022. The amount due to GWA at September 30, 2022 was $408,221, 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.

11. Restricted Net Position

At September 30, 2022, net position was restricted for the following purposes:

Debt service	$ 5,717,177
Budgeted maintenance and operating expenses	5,127,133
Demand Side Management Program and projects	3,200,040
	$14,044,350

12. Capital Assets

A summary of changes in capital assets for the year ended September 30, 2022 were as follows:

	Estimated Useful Lives in Years	Beginning Balance October 1, 2021	Transfers and Additions	Transfers and Deletions	Ending Balance September 30, 2022
Utility plant					
Depreciable:					
Steam production plant	25 - 50	$ 124,459,511	$ 1,278,351	$ -	$ 125,737,862
Other production plant	12 - 25	398,040,496	15,216,125	(8,582)	413,248,039
Transmission plant	30 - 45	231,508,333	2,055,171	(175,552)	233,387,952
Distribution plant	15 - 45	250,086,130	7,436,059	(1,114,686)	256,407,503
General plant	3 - 60	115,668,605	2,996,776	(3,876,155)	114,789,226
Production plant under capital lease	15 - 40	32,466,516	-	-	32,466,516
		1,152,229,591	28,982,482	(5,174,975)	1,176,037,098
Accumulated depreciation		(703,987,489)	(35,212,942)	4,990,840	(734,209,591)
		448,242,102	(6,230,460)	(184,135)	441,827,507
Non-depreciable:					
Land and land rights		12,249,830	-	-	12,249,830
Construction work in progress		24,018,928	29,197,363	(32,269,611)	20,946,680
		36,268,758	29,197,363	(32,269,611)	33,196,510
Utility Plant, net		$ 484,510,860	$ 22,966,903	$ (32,453,746)	$ 475,024,017
Lease assets:					
Cost		$ -	$ 21,115,196	$ -	$ 21,115,196
Accummulated amortization		-	(4,135,933)	-	(4,135,933)
Lease assets, net		$ -	$ 16,979,263	$ -	$ 16,979,263

GPA reassessed the estimated useful life of Cabras 1 and 2 based on the expected retirement of these plants when the new power plant becomes operational (see note 9). GPA recorded additional depreciation expense of approximately $3.7 million during the year ended September 30, 2022 due to the revised estimated useful life of these power plants.

13. Subsequent Event

On May 24, 2023, the island of Guam suffered severe damages caused by super typhoon Mawar. As of the date of this report, GPA is unable to reasonably estimate the potential impact on its future financial statements.

Required Supplementary Information

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule I
Required Supplementary Information
Schedule of Proportional Share of the Net Pension Liability

Defined Benefit Plan
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017	2016	2015
Total Government of Guam net pension liability	$ 963,578,517	$ 1,246,336,897	$ 1,214,462,675	$ 1,179,192,550	$ 1,142,249,393	$ 1,368,645,126	$ 1,436,814,230	$ 1,246,306,754
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 51,163,877	$ 68,455,958	$ 69,262,940	$ 64,825,399	$ 58,849,896	$ 71,113,926	$ 74,504,797	$ 67,025,973
GPA's proportion of the net pension liability	5.31%	5.49%	5.70%	5.50%	5.15%	5.20%	5.19%	5.38%
GPA's covered-employee payroll**	$ 28,273,584	$ 28,706,604	$ 29,057,547	$ 28,249,473	$ 26,188,178	$ 26,308,182	$ 26,516,476	$ 27,155,671
GPA's proportionate share of the net pension liability as percentage of its covered employee payroll	180.96%	238.47%	238.36%	229.47%	224.72%	270.31%	280.98%	246.82%
Plan fiduciary net position as a percentage of the total pension liability	70.14%	61.48%	62.25%	63.28%	60.63%	54.62%	52.32%	56.60%

* 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.

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule II
Required Supplementary Information
Schedule of Proportional Share of the Net Pension Liability

Ad Hoc COLA/Supplemental Annuity Plan for DB Retirees
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017	2016
Total Government of Guam net pension liability***	$ 308,340,992	$ 321,889,969	$ 324,192,725	$ 289,875,668	$ 288,147,121	$ 229,486,687	$ 235,799,709
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 15,888,333	$ 16,611,913	$ 16,449,816	$ 14,132,063	$ 13,986,942	$ 10,942,403	$ 11,002,776
GPA's proportion of the net pension liability	5.15%	5.16%	5.07%	4.88%	4.85%	4.77%	4.67%
GPA's covered-employee payroll**	$ 27,436,251	$ 26,972,315	$ 25,852,347	$ 25,052,074	$ 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	57.91%	61.59%	63.63%	56.41%	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.

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule III
Required Supplementary Information
Schedule of Proportional Share of the Net Pension Liability

Ad Hoc COLA Plan for DCRS Retirees
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017
Total Government of Guam net pension liability***	$ 70,547,850	$ 66,393,472	$ 59,884,407	$ 49,342,424	$ 62,445,490	$ 61,688,067
Guam Power Authority's (GPA's) proportionate share of the net pension liability	$ 3,415,505	$ 3,363,211	$ 3,507,330	$ 2,843,640	$ 3,717,897	$ 3,818,888
GPA's proportion of the net pension liability	4.84%	5.07%	5.86%	5.76%	5.95%	6.19%
GPA's covered-employee payroll**	$ 13,613,013	$ 13,134,227	$ 13,793,153	$ 15,241,921	$ 22,433,189	$ 22,600,153
GPA's proportionate share of the net pension liability as percentage of its covered employee payroll	25.09%	25.61%	25.43%	18.66%	16.57%	16.90%

* 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.

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule IV
Required Supplementary Information
Schedule of Pension Contributions
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017	2016
Statutorily required contribution	$ 6,700,019	$ 6,649,614	$ 6,882,846	$ 7,047,809	$ 6,458,402	$ 6,474,792	$ 6,993,365
Contributions in relation to the statutorily required contribution	6,682,875	6,535,155	6,932,584	7,468,311	6,454,286	6,464,756	6,974,715
Contribution (excess) deficiency	$ 17,144	$ 114,459	$ (49,738)	$ (420,502)	$ 4,116	$ 10,036	$ 18,650
GPA's covered-employee payroll **	$ 28,273,584	$ 28,706,604	$ 29,057,547	$ 29,057,547	$ 28,249,473	$ 26,188,178	$ 26,308,182
Contribution as a percentage of covered-employee payroll	23.64%	22.77%	23.86%	25.70%	22.85%	24.69%	26.51%

* 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.

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule V
Required Supplementary Information
Schedule of Changes in the Proportional Share of the Total OPEB Liability and Related Ratios
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017
Service cost	$ 4,322,457	$ 5,076,726	$ 3,108,876	$ 3,637,954	$ 4,181,160	$ 3,281,051
Interest	3,609,190	4,410,618	5,104,601	5,383,112	4,805,542	4,969,757
Changes in proportionate share	72,207	2,835,386	(22,527)	13,530,834	169,528	---
Difference between expected and actual experience	4,633,265	17,831,719	---	(33,509,074)	---	---
Change of assumptions	4,659,031	(29,325,681)	36,002,259	(12,122,578)	(14,997,174)	16,377,134
Benefit payments	(2,750,749)	(2,400,174)	(2,535,819)	(2,597,426)	(2,337,202)	(2,337,202)
Net change in total OPEB liability	14,545,401	(1,571,406)	41,657,390	(25,677,178)	(8,178,146)	22,290,740
Total OPEB liability, beginning	160,364,667	161,936,073	120,278,683	145,955,861	154,134,007	---
Total OPEB liability, ending	$ 174,910,068	$ 160,364,667	$ 161,936,073	$ 120,278,683	$ 145,955,861	$ 154,134,007
Covered-employee payroll as of valuation date	$ 40,268,155	$ 31,845,149	$ 31,141,489	$ 29,507,688	$ 25,806,659	$ 25,806,659
Total OPEB liability as a percentage of covered-employee payroll	434.36%	503.58%	520.00%	407.62%	565.57%	597.26%

Notes to schedule:

Discount rate	2.260%	2.210%	2.660%	4.180%	3.630%	3.058%

Change in benefit terms:
None.

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

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule VI
Required Supplementary Information
Schedule of Proportional Share of the Total OPEB Liability
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017
Total OPEB liability **	$ 2,771,848,089	$ 2,518,489,145	$ 2,553,523,376	$ 1,874,970,335	$ 2,431,048,672	$ 2,532,753,040
GPA's proportionate share of the total OPEB liability	$ 174,910,068	$ 160,364,667	$ 161,936,073	$ 120,278,683	$ 145,955,861	$ 154,134,007
GPA's proportion of the total OPEB liability	6.31%	6.37%	7.97%	8.64%	6.00%	6.00%
GPA's covered-employee payroll	$ 40,268,155	$ 31,845,149	$ 31,141,489	$ 29,507,688	$ 25,806,659	$ 25,806,659
GPA's proportionate share of the total OPEB liability as percentage of its covered-employee payroll	434.36%	503.58%	520.00%	407.62%	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.

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule VII
Required Supplementary Information
Schedule of OPEB Contributions
(Unaudited)

Last 10 Fiscal Years*

	2022	2021	2020	2019	2018	2017
Actuarially determined contribution	$ 11,787,980	$ 13,113,077	$ 10,346,390	$ 11,836,895	$ 4,181,160	$ 10,762,017
Contributions in relation to the actuarially determined contribution	2,750,749	2,400,174	2,535,819	2,597,426	2,337,202	2,337,202
Contribution deficiency	$ 9,037,231	$ 10,712,903	$ 7,810,571	$ 9,239,469	$ 1,843,958	$ 8,424,815
Covered-employee payroll as of valuation date	$ 40,268,155	$ 31,845,149	$ 31,141,489	$ 29,507,688	$ 25,806,659	$ 25,806,659
Contributions as a percentage of covered-employee payroll	6.83%	7.54%	8.14%	8.80%	9.06%	9.06%

Notes to schedule:

Valuation date:

Actuarially determined contributions rates are calculated as of September 30, 2020.

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:	2.75%
Healthcare cost trend rates:	Non-medicare 13.5%; Medicare -25%; and Part B 5.33%. For the second year, '6.75% then reducing 0.25% annually to an ultimate rate of 4.25% for 2029 and later years.
Salary increase:	4.0% to 7.5%
Mortality (Healthy Retiree):	Head-count weighted PUB-2010 Table, set forward 4 years for males and 2 years for females, respectively, projected generationally using 50% of MP-2020.
Mortality (Disabled Retiree):	UB-2010 Disabled Retiree Amount Weighted mortality table set forward 4 years for males and 2 years for females, respectively, using 130% of the rates before age 80 and projected generationally from 2010 using 50% of mortality improvement scale MP-2020

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

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule of Sales of Electricity

		Year Ended September 30, 2022
Commercial	$	155,894,421
Residential		167,563,903
Government of Guam		62,802,060
U.S. Navy		87,300,333
	$	473,560,717
Annual Electric Sales in kWh		
Commercial		555,557,593
Residential		489,581,905
Government of Guam		181,579,352
U.S. Navy		313,440,690
		1,540,159,540

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule of Operating and Maintenance Expenses

		Year Ended September 30, 2022
Administrative and General:		
Salaries and wages:		
Regular pay	$	5,821,623
Overtime		269,363
Premium pay		8,455
Benefits		2,672,051
Pension adjustment		5,572,872
OPEB adjustment		6,484,764
Total salaries and wages		20,829,128
Insurance		7,566,050
Contract		4,910,808
Retiree healthcare and other benefits		3,007,631
Utilities		2,036,869
Lease expense		305,477
Other administrative expenses		270,753
Travel		226,674
Miscellaneous		180,720
Operating supplies		118,226
Training		89,727
Trustee fee		80,171
Office supplies		51,128
Overhead allocations		31,053
Completed work orders		(767,543)
Total administrative and general	$	38,936,872
Customer Accounting:		
Salaries and wages:		
Regular pay	$	2,051,797
Benefits		271,295
Overtime		72,175
Premium pay		1,113
Total salaries and wages		2,396,380
Collection fee		2,276,899
Demand-side management program		1,956,900
Contracts		412,120
Communications		280,944
Office supplies		16,068
Miscellaneous		849
Total customer accounting	$	7,340,160

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule of Operating and Maintenance Expenses, continued

		Year Ended September 30, 2022
Fuel:		
Salaries and wages:		
Regular pay	$	91,948
Overtime		8,979
Premium pay		170
Total salaries and wages		101,097
Fuel		315,669,718
Total fuel costs	$	315,770,815
Other Production:		
Salaries and wages:		
Regular pay	$	6,364,403
Overtime		3,206,844
Premium pay		224,253
Benefits		748,851
Total salaries and wages		10,544,351
Contract		5,695,110
Operating supplies		3,358,852
Overhead allocations		86,641
Completed work orders		52,872
Office supplies		14,341
Total other production	$	19,752,167
Transmission and Distribution:		
Salaries and wages:		
Regular pay	$	8,726,599
Benefits		644,210
Overtime		267,744
Premium pay		63,766
Total salaries and wages		9,702,319
Overhead allocations		1,956,543
Completed work orders		934,787
Operating supplies		701,947
Contract		382,001
Office supplies		12,730
Total transmission and distribution	$	13,690,327

Guam Power Authority
(A Component Unit of the Government of Guam)

Schedule of Salaries and Wages

		Year Ended September 30, 2022
Salaries and wages:		
Regular pay	$	23,056,370
Overtime		3,825,105
Premium pay		297,757
Benefits		4,336,407
Pension adjustment		5,572,872
OPEB adjustment		6,484,764
Total salaries and wages	$	43,573,275