



Citizen-Centric Report

FISCAL YEAR 2023 (OCTOBER 2022 - SEPTEMBER 2023)



OUR VISION

GPA will be the best utility providing outstanding energy solutions to our island community.

OUR MISSION

GPA shall provide:

Reliable
Efficient, Effective, Environmentally Sound
Affordable, Accountable
Leading Energy Solutions

GOVERNANCE AND LEADERSHIP



Consolidated Commission on Utilities

GPA is governed by the Consolidated Commission on Utilities (CCU), an elected five-member Board and is subject to regulations of the Guam Public Utilities Commission (GPUC).

Joseph (Joey) T. Duenas, Chairman
Francis E. Santos, Vice Chairman
Pedro Roy Martinez, Secretary
Michael Limtiaco, Commissioner
Simon A. Sanchez II, Commissioner

Guam Power Authority

John M. Benavente, P.E. General Manager

WHAT'S INSIDE

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Published: May 2024

ABOUT US

Established in 1968, the Guam Power Authority (GPA) is a public corporation and autonomous instrumentality, of the Government of Guam. GPA operates independently, free from financial subsidies from its central government, with revenues derived solely from rates. With a storied history spanning over 55 years, GPA has undergone a remarkable transformation, evolving from humble beginnings into a multifaceted organization at the forefront of Guam's energy landscape. From its inception with virtually no assets, GPA has emerged as the sole provider of electric generation, transmission, and distribution services throughout Guam, serving both civilian communities and U.S. military bases.

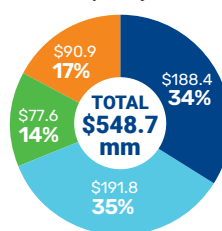
From pioneering renewable energy initiatives to modernizing grid infrastructure, GPA remains steadfast in its commitment to advancing Guam's energy resilience and sustainability. At the heart of GPA's operations lies its workforce, comprising 408 Certified and Technical Professionals dedicated to powering progress and prosperity for Guam. These skilled individuals form the backbone of GPA's service delivery, ensuring the reliable and efficient provision of electricity to its 52,642 customers.

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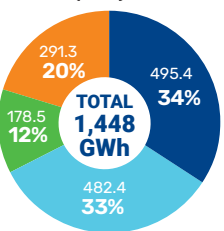
OUR CUSTOMERS

Segment Demographics	FY 2021	FY 2022	FY 2023
Residential	45,292	45,271	44,943
Commercial	5,852	5,879	5,924
Gov't of Guam	1,680	1,722	1,774
U.S. Navy	1	1	1
TOTAL	52,825	52,873	52,642

FY 2023 Electric Revenue Composition (\$mm)



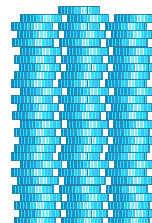
FY 2023 Customer Energy Sales (GWh)



OUR RATES

FY 2023 ELECTRICITY RATE BREAKDOWN

\$1 Cost Allocation Category



79 cents
Production Fuel

7 cents
Administrative & General

5 cents
Debt Service Payments

4 cents
Other Production Costs

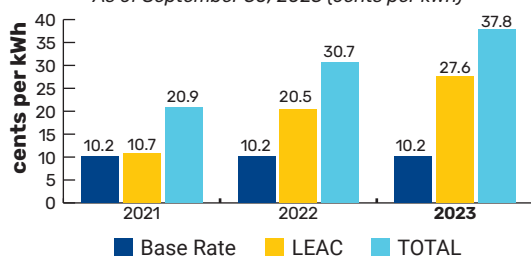
2 cents
Transmission & Distribution Costs

2 cents
IPP (Purchased Power)

1 cent
Customer Accounting

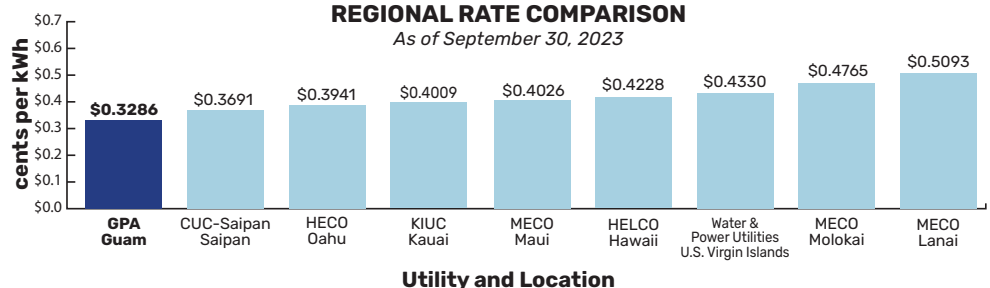
FY 2023 SYSTEMS AVERAGE RATE

As of September 30, 2023 (cents per kWh)



REGIONAL RATE COMPARISON

As of September 30, 2023





Our Progress

CITIZEN-CENTRIC REPORT FISCAL YEAR 2023

ACCOMPLISHMENTS AND KEY STRATEGIES



PRODUCT AFFORDABILITY

2023

- \$0 increase in GPA base rate/10 consecutive years
- FTE level 408
- Prudent managing of LEAC rate through strategic fuel purchases and efficient fuel usage with low-cost utility-scale renewable energy contracts resulting in affordable and sustainable rates
- The state-of-the-art advanced combined cycle 198 MW Ukudu Power Plant, currently under construction, will allow GPA to add clean, affordable energy to its power generation portfolio.
- Maximized ratepayer access to government sponsored Emergency Rental Assistance (ERA) program and Guam's Homeowner Assistance Fund (HAF) Program
- Fuel diversification initiatives ongoing to ensure resiliency and reliability to stabilize and keep costs affordable

2022

- \$0 increase in GPA base rate
- Prudent managing of LEAC rate
- FTE level 412*
- Continued maximization of government sponsored Emergency Rental Assistance (ERA) program
- Commissioned- 60-megawatt KEPCO Mangilao Solar (KMS) photovoltaic farm.

**Prior FTE level data has been audited and updated as of July 2024*

SUPERIOR CUSTOMER SERVICE



2023

- Enhanced GPA's E-Customer Services save customers time and money.
- Paid out \$1,409,695 in Energy Sense Rebates for eligible customers
- Paid out \$63M in energy credits to approximately 51,000 eligible customers under Prugraman Ayuda Para I Taotao-ta Energy Credit Program
- Successfully partnered with the Guam Energy Office (GEO) in the "We CARE, Guam!" outreach to provide energy saving equipment rebates for eligible low-income households beyond the GEO's standard grant funding.

2022

- Paid out \$1,755,699 in Energy Sense Rebates to customers.
- Paid out \$15.8M in energy credits to approximately 51,000 eligible customers.
- Partnered with Guam Energy Office for the We CARE, Guam Program.
- Automated the application process for GPA's Energy Sense Rebate Program.
- Co-sponsored Guam Energy Expo.
- Expanded E-customer services



HIGH SYSTEM RELIABILITY

2023

- Islandwide power system goals and strategies keeping with GPA's Clean Energy Master Plan (Integrated Resource Plan)
- Compliant with USEPA 2020 & 2022 revised Consent Decree, meeting all clean air quality standards
- Battery Energy Storage Systems (BESS) systems mitigate under frequency load shedding and high production costs during peak hours
- KEPCO Mangilao Solar 60-megawatt solar photovoltaic site produces energy, thus reducing Guam's reliance on imported oil
- New Ukudu 198MW Combined Cycle Baseload Power Plant with 25MW energy storage battery, construction progress fully ongoing
- New dual fuel pipeline for new Ukudu 198MW Combined Cycle Baseload Power Plant under construction
- Phase II Hanwha 41 MW Solar Photovoltaic facility with load shifting battery with 22MW/66MWH under construction
- Phase IV 180 MW Solar Photovoltaic bid issued - bids received for 330 MW renewable energy for award in 2024 to be added to the grid
- No power blackout despite Typhoon Mawar 150mph winds. Progressive hardening projects proved successful. Recovery is the fastest it has been compared to other similar typhoons in the past.
- \$15M on island inventory levels of essential materials, parts, and equipment; and Mutual Aid agreements and resource-sharing partnerships with off island public power utilities bolstered a record-time Typhoon Mawar recovery and restoration
- Awarded USDOE ETIPP Technical Assistance for Grid Assessment grant for Virtual Power Plant Program Integration
- Awarded DOI OIA EIC Grant for Guam 100 in partnership with NREL to comprehensively analyze stakeholder driven pathways to Guam's clean energy future

2022

- Adopted the GPA Clean Energy Master Plan, committed to a 50% renewable portfolio standard by 2030
- Approved \$1.5M for physical security Proof of Concept projects
- Keep significant on island inventory levels of essential materials, parts, and equipment to meet disaster recovery needs
- Maintain Mutual Aid agreements and resource-sharing partnerships with off island public power utilities to support restoration efforts
- Upgraded refurbishment of GPA's bulk storage fuel tanks 1934 and 1935.
- P.L. 36-104 enacted the second amended and restated land lease agreement with Guam Ukudu Power, LLC for the construction of the 198 MW Ukudu base load Power Plant and Battery Energy Storage System facility
- Three-year extension of the Dock Facility User Agreement with Tristar Terminal Guam, Inc. (TTGI) ensuring an uninterrupted supply of fuel to GPA plants through the use of the F-1 Dock Facility for receiving bulk fuel shipments into the GPA storage facilities
- Completed ground breaking for new combined cycle 198 MW Ukudu base load Power Plant construction
- Construction of new fuel pipeline to Ukudu base load Power Plant ongoing
- Baseload units Piti 8 & 9 successfully converted to ULSD
- Baseload units Cabras 1 & 2 successfully converted to 0.2%S ULSRFO

FINANCIALLY SOUND AND STABLE



2023

- 87 days unrestricted cash
- 1.4x Debt Service Coverage
- Maintained investment-grade bond ratings:
 - S&P-BBB/Stable Outlook
 - Moody's-Baa2/Stable Outlook
 - Fitch-BBB/Stable Outlook
- Ongoing 10-Year GPA U.S. Navy Utility Services Contract(USC)
- \$15M stock on hand of material inventory and equipment assisted in meeting disaster recovery needs.

2022

- 60 days unrestricted cash
- 1.7x debt service coverage
- Maintained investment-grade credit ratings:
 - S&P-BBB/Stable Outlook
 - Moody's-Baa2/Stable Outlook
 - Fitch-BBB/Stable Outlook
- Physical hedging, acquiring 30-90 days of storage, with an 11-day average MOPS, 85 MW of solar as long-term hedge with 1% escalator, 40 MW ESS, Wind.
- Successfully executed a 10-Year GPA Navy Utility Services Contract (USC).
- Issued Refunding Bonds mandated by P.L. 36-80



COMMITMENT TO WORKFORCE DEVELOPMENT

2023

- 1st Cycle in-house Plant Operator/Maintenance Worker In-House Training Program ongoing/17 Trainees; recruitment underway for 2nd Cycle
- USDOL Transmission & Distribution (T&D) Registered Apprenticeship Program:
 - 5th Cycle/16 Apprentices graduated October 2023
 - 6th Cycle/16 Apprentices will graduate in 2024
 - Launched 7th Cycle/20 Apprentices
- Expanded Internship terms and concentration in Cybersecurity, Finance, Human Resources, Engineering and Public Administration and partnering with UOG
- Recruited 8 new engineers
- Reinstated Employee Service Awards
- Launched Human Resources Weekly Employee Newsletter
- Earned American Public Power Association (APPA) Safety Award of Excellence for safe operating practices in 2023.
- Earned Designated American Public Power Association (APPA) two-year Smart Energy Provider (SEP) Award for FY2021-2023 and FY2023-2025

2022

- Earned the American Public Power Association's (APPA) 2022 Safety Award of Excellence for safe operating practices.
- Onboarded 21 trainees under a new Plant Operator Maintenance Training Program.
- Cybersecurity Internship program ongoing.
- Advanced T&D apprenticeships, Accounting Internships

OPTIMIZING THE USE OF TECHNOLOGY



2023

- Ongoing hardening of GPA's IT/OT infrastructure
- Processed 600 automated online Energy Sense Rebate Program (ESRP) applications for both residential and commercial customers to save energy and reduce power bills
- GPA Load Management Program study ongoing
- User- Friendly digital transformation(s):
 - Launched new robust website
 - Enhanced PayGPA.com and MyEnergyGuam.com
- Sponsored Cybersecurity Conference and Cyber Strike Training for IT/ OT professionals in government of Guam, federal government DOD, and other critical infrastructure partners
- Sponsored GPA Guam Clean Energy Transition Preconference in partnership with UOG's Conference on Island Sustainability

2022

- Launched Energy Sense Rebate Program (ESRP) online application process.
- Increased digital transformations for providing services to customers, enhanced paygpa and myenergyguam customer service tools.
- Celebrated National Drive Electric Week with an Electric Vehicle Road Show.
- CCU approved \$1.5M Physical Security Proof of Concept (POC) initiative.
- Launched GPA customer E-newsletter.



Our Finances

CITIZEN-CENTRIC REPORT FISCAL YEAR 2023

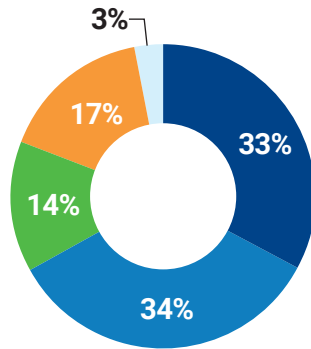
REVENUES

Type	FY 2023	FY 2022	% Change
(in \$000)			
Residential	\$ 188,415	\$ 167,564	12.4%
Commercial	\$ 191,817	\$ 155,894	23.0%
Government	\$ 77,583	\$ 62,802	23.5%
Navy	\$ 90,867	\$ 87,300	4.1%
Other Income	\$ 14,163	\$ 8,554	65.6%
Total	\$ 562,844	\$ 482,115	16.7%

The Authority's operating revenues increased by \$75 million, which is mainly due to the increase in fuel prices. The \$5.6 million increase in Other Income is mainly attributable to increase in interest rates and in grants received from the US Government.

FY2023

- Residential
- Commercial
- Government
- Navy
- Other Income



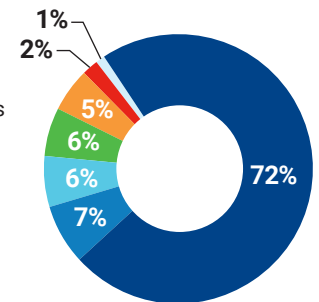
EXPENSES

Type	FY 2023	FY 2022	% Change
(in \$000)			
Production Fuel	\$ 399,920	\$ 315,771	26.6%
Interest & Other Extraordinary Expenses	\$ 39,916	\$ 27,460	45.4%
Administrative & General	\$ 33,790	\$ 38,937	-13.2%
Depreciation & Amortization	\$ 35,216	\$ 35,213	0.0%
IPP & Other Production Costs	\$ 27,997	\$ 29,108	-3.8%
Transmission & Distribution	\$ 11,038	\$ 13,690	-19.4%
Customer Accounting	\$ 7,840	\$ 8,563	-8.4%
Total	\$ 555,718	\$ 468,742	18.6%

GPA's operating and maintenance expenses decreased due to lower production costs. Production Fuel increased by \$84 million, which is mainly attributable to high fuel costs. Other Extraordinary Expenses increased due to Typhoon Mawar expenses incurred, which are pending FEMA approval as of September 30, 2023.

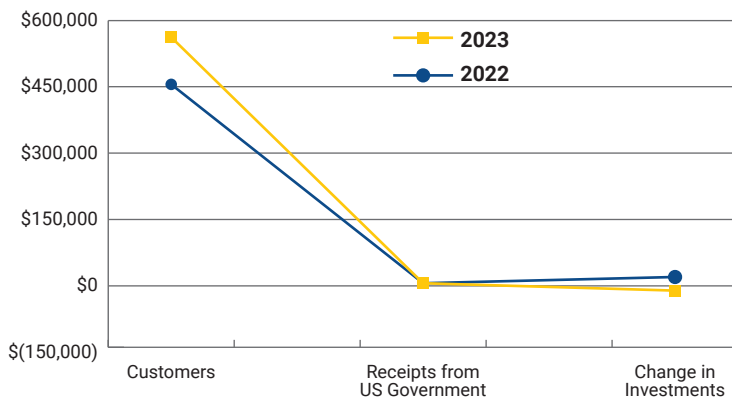
FY2023

- Production Fuel
- Interest & Other Extraordinary Expenses
- Administrative & General
- Depreciation & Amortization
- IPP & Other Production Costs
- Transmission & Distribution
- Customer Accounting



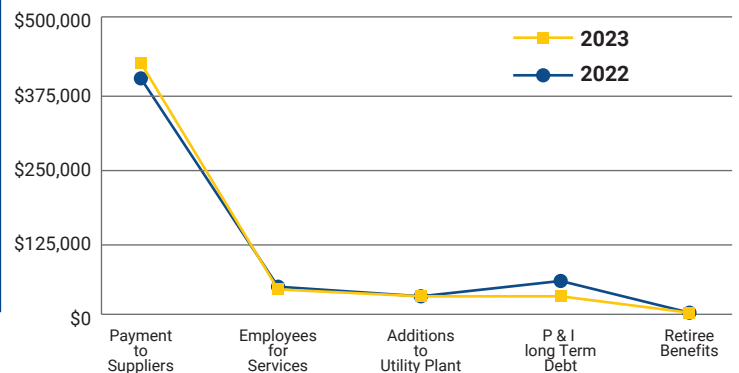
SOURCES OF FUNDS

Type	FY 2023	FY 2022
(in \$000)		
Customers	\$ 566,760	\$ 457,036
Receipts from US Government	\$ 3,302	\$ 2,244
Change in Investments	\$ (11,156)	\$ 24,404
Total	\$ 558,906	\$ 483,684



USES OF FUNDS

Type	FY 2023	FY 2022
(in \$000)		
Payment to Suppliers	\$ 429,633	\$ 404,116
Employees for Services	\$ 39,356	\$ 41,483
Additions to Utility Plant	\$ 27,743	\$ 28,149
P & I - Long Term Debt	\$ 27,766	\$ 65,383
Retiree Benefits	\$ 3,382	\$ 4,278
Total	\$ 527,879	\$ 543,410



All financial activities of GPA are in line with the mission, vision and goals established by the Authority. GPA's financial statements for Fiscal Year 2023 received a clean audit from Ernst & Young, LLP. GPA's comprehensive financial statements may be viewed online at www.guampowerauthority.com.

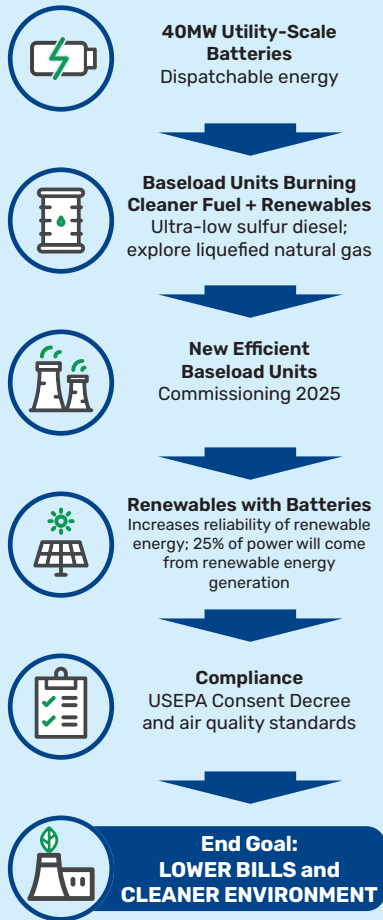


Our Future Challenges

CITIZEN-CENTRIC REPORT FISCAL YEAR 2023

CLEAN ENERGY MASTER PLAN

Road Map to 100% Renewable Energy by 2040



16% Renewable Energy

100%
Renewable Energy
by 2040

50%
Renewable Energy
by 2030

16%
Current Status

2 utility-scale renewable energy solar farms totaling 85MW currently online, with more being procured

LOOKING AHEAD – THE PATH FORWARD

Today, there exists a critical shortfall of public power generation supply for Guam. GPA will overcome this energy gap with the commissioning of the new Ukudu 198MW Combined Cycle Baseload Power Plant in September 2025. While critical, this current substantial power deficit is only temporary, as GPA has taken several proactive measures to mitigate the operational issues.

GPA complies with a stipulated United States Environmental Protection Agency (USEPA) Consent Decree adopted by the Consolidated Commission on Utilities (CCU), approved by the Guam Public Utilities Commission (GPUC), and signed in May 2020, and revised in January 2022. It specifies GPA meeting USEPA National Ambient Air Quality Standards (NAAQS), the completion of several projects for renewable energy, increased energy storage, and fuel infrastructure projects for the transition to cleaner fuels, and retirement of aging steam plants (Cabras 1 & 2)

Clean Energy Master Plan (CEMP)/Integrated Resource Plan (IRP)

- A comprehensive roadmap to transition Guam from legacy fossil fuel-fired power generation to renewable energy and a non-greenhouse gas emission electrical energy supply for Guam. Reduces GPA's carbon footprint, improves energy reliability, ensures energy resiliency, reduces waste and improves affordability.
- Satisfies all clean air compliance requirements of the USEPA Consent Decree, avoiding millions of dollars of potential fines and penalties.
- Directs for evaluation and action on the need for new generation resources to meet future load growth, addresses all environmental requirements, and optimizes all costs.
- A balanced approach that includes energy efficiency, renewable energy, grid transformation, and transportation electrification, to secure Guam's energy future.

Energy Security and a Sustainable Guam

GPA moves ahead planning for Guam's energy security to include long-term generation capacity for reliability and sustainability, thus achieving additional operational savings through efficiencies.

- Technology upgrades will integrate renewables.
- Ukudu 198MW Combined Cycle Baseload Power Plant commission in September 2025 and will provide improved generation reliability and substantially reduce fuel operating costs once commissioned.
- GPA committed to achieve a 50% Renewable Portfolio Standard by 2030 and 100% by 2040.
- Ukudu 198MW Combined Cycle Baseload Power Plant will reduce fuel oil imports by over 879,000 barrels annually translating into savings for all ratepayers.
- Approximately 330 MW of Renewable Energy with energy shifting energy storage batteries may be awarded late summer of 2024 as part of GPA's Phase IV renewables bid. GPA may achieve 50% by 2027, years ahead of the 2035 mandate.
- HANWHA 41 MW Solar PV Plant has received approvals from both CCU & GPUC. Targeted commissioning is NLT April 2026.
- Fuel diversification achieved through renewable energy includes the burning of clean, ultra-low sulfur diesel (ULSD) and liquefied natural gas (LNG) in 50% of baseload plants and 100% of non-baseload power plants.
- In compliance with the NAAQS, air quality is improved as sulfur dioxide (SO₂) emissions have decreased by 99.9%.
- Virtual Power Plant - Small Scale Roof-Top and Raw Land Solar Photovoltaics (PV) Programs are under development. Engineering technical analysis and work on bid specifications are ongoing. GPA is analyzing best way to integrate smaller-sized renewable capacity into the grid. The bid is considering 20MW capacity as the initial pilot project.

Addressing Generation Capacity Shortfall

- Completed ahead of schedule the Piti 7 repair of the plenum for 22 MW to 30 MW capacity
- Currently utilizing existing Battery Energy Storage System (ESS) for 16 MWH to be utilized during peak hours
- Completed the repair of the typhoon-damaged Yigo Combustion Turbine (CT); currently operating at 16 MW pending further maintenance

- Procuring temporary power (additional generators) with Aggreko to supply 20 MW power package for 24 months
- Continuing to expand interruptible load capacity, approximately 16 MW currently available for use
- Rehabilitating and repairing other smaller units (Tenjo, Talofo'fo' & Manenggon/Pulantat, Yigo diesel units)
- Seek authorization for \$300M in Green Bonds to improve grid infrastructure to better integrate renewables and build Energy Storage Systems (ESS) to maximize production and efficiency, as well as mitigate distribution voltage issues and minimize individual project ESS requirements.
- Maximize the pursuit of federal grants to fund clean and renewable energy projects.
- Leading and facilitating the electrification of Guam's transportation islandwide.
- Work alongside Electric Vehicle (EV) partners to explore and establish EV programs to ensure Guam's power infrastructure can and will meet future EV demands, including developing and implementing charging rates, Time-of-Use rates, incentives, customer rebates and EV charging infrastructure pilot projects.
- Improve customer service delivery, energy affordability and GPA productivity by taking the lead to seek changes of government procurement laws including bid protests, local preference for product procurement versus long-term energy contracts and other procurement issues, to better serve the best interest of ratepayers and the community.

Cybersecurity Strategies

- To mitigate the risk of business operations impact and damage from cybersecurity incidents or cyber-attacks, GPA invests in cybersecurity and operational safeguards, including training and awareness programs and phishing simulations and has an in-house cybersecurity team that detects and responds to cybersecurity threats.
- GPA along with GWA have jointly initiated cybersecurity policies and conducted system testing and assessment to identify necessary security improvements.
- Works closely with the Guam Homeland Security, Federal Cybersecurity & Infrastructure Security Agency (CISA), Department of Defense (DOD) CIS division, and the Department of Energy (DOE). This increases our awareness in the Cybersecurity sector.
- GPA and the Department of Energy (DOE) joined the Cybersecurity Risk Information Sharing Program (CRISP). This included implementing network monitoring and data gathering analytics on the Authority's business and operational network. Network activity is monitored for network anomalies, malware, suspicious traffic, and intrusion activity, and notifications are sent to GPA's Security Operations team.
- GPA and GWA have an ongoing project for Physical Security, which includes building security and access controls for the Authority's remote sites with IT assets. Cybersecurity has been closely linked with Physical Security for the protection of its business and operational networks.
- GPA and GWA have done Network Security and Vulnerability Assessments in 2022 and 2023. Such assessments are done to identify gaps or issues within the Authority's network and systems and remediation to address them.

Infrastructure Resiliency Planning

- GPA leads local exploration and discussions and engages national experts in search of long-term energy solutions to protect and improve Guam's environment.
- GPA has advanced talks and meetings with FEMA, DOD Military branches and other federal entities to review and invest in hardening and moving the GPA grid underground to address vulnerability to natural disasters and military conflicts including enhancements to benefit the community and support the nation's strategic interests.
- The Guam Infrastructure Resiliency Plan includes requesting \$6.4 billion to cover the \$2.4 billion estimated costs for immediate critical infrastructure needs, as well as an additional \$4 billion to underground remaining existing underground systems are being studied. This work will ensure a more resilient and reliable energy supply for Guam, as well as quicker recoveries from natural disasters.

We want to hear from you.

Please contact GPA and let us know what information we can provide to you in future reports.

John J.E. Kim, CPA, GPA Chief Financial Officer

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www.guampowerauthority.com



Scan to learn more about GPA's Clean Energy Master Plan.

/Guam Power Authority