Bringing Energy Solutions to You

Insights

A monthly newsletter for all GPA Customers • Issue No. 82 • January 2024

Addressing Generation Capacity Shortfall

Piti 7 Repair of the Plenum
ECD: December 3, 2023
Capacity: 22MW to 30MW
✔ **COMPLETED AHEAD OF SCHEDULE 11/30**

Procuring Temporary Power
ECD: May 2024 or sooner *if no other delays*
Capacity: 40MW

Returning Caterpillar and Wartsila Units to Service
(to increase plant capacity)
ECD: April 2024
Capacity: 17MW

Repairing the Typhoon-Damaged Yigo Combustion Turbine
ECD: February 2024
Capacity: 20MW

Utilizing Existing Energy Storage Batteries (ESS)
(to shift energy to peak time)
ECD: March 2024
Capacity: 40MWh *for peak hours*

Continuing to Expand Interruptible Load Capacity
ECD: Ongoing
Capacity: *Approx.* 16MW *currently*

**ECD is Expected Completion Date*

Powering Progress: Ukudu Plant's Completion Will Lower Bills, Provide Stable Power Supply and Clean Energy

Target Completion Between September 2025 and January 2026


Treated Water Storage Tanks - Staging of tank walls is in progress


Heat Recovery Steam Generator (HRSG) - Insulation repair and replacement is ongoing




Gas Turbines and Generators (GTG) - Installation of air intakes is ongoing


GTG Building - Exterior siding installation is nearly complete


Demineralized Water Tank - Stair construction is completed


BESS - Excavation for the battery control building foundation is ongoing


Cooling Tower & Basin - Cooling Tower frame installation is nearly complete


Switchyard - Ring bus structures are in place

The 198 MW Ukudu Power Plant will:

- Lower ratepayer costs
- Reduce fuel consumption through efficient machine technology
- Bring GPA into compliance with environmental regulations
- Include 25MW battery energy storage for immediate back up power
- Treat waste water for cooling and reduce sewer water ocean outfall
- Reduce water draw from aquifer
- Reduce Guam's carbon footprint by cutting oil imports by >500,000 barrels annually

Road Map to 100% Renewable Energy by 2040

40MW Utility Scale Batteries → Baseload Units on Cleaner Fuel + renewable → New Efficient Baseload Units → Renewables with Batteries → Compliance → **End Goal: LOWER BILLS and CLEANER ENVIRONMENT**

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

We've reached 16% Renewable Energy.

- **16%** Our current status
- **50%** Renewable Energy by 2030
- **100%** Renewable Energy by 2040

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GPA Continues Efforts to Increase Power Generation Capacity

Precautionary 1-Hour Rotating Outage Schedule Extended through Jan. 31st

The Guam Power Authority (GPA) continues its comprehensive approach to improve power generation capacity. Preventive maintenance and necessary repairs to baseload generators and combustion turbines in December were completed without requiring load shedding except for two instances. Despite the positive progress, GPA extends the December 2023 potential 1-hour rotating outage schedule through January 31, 2024.

GPA has been actively addressing solutions to ensure adequate generation for the island since the beginning of 2023. Projects to improve power generation capacity were significantly hindered initially by the COVID-19 pandemic and further delayed by Typhoon Mawar that caused damages to the 198-megawatt Ukudu Power plant and the 20-megawatt Yigo Combustion Turbine. "GPA continues to work on a multipronged approach and future solutions to minimize disruptions, resolve our power system shortfall, and increase generation capacity to meet the power needs of the island. The power generation teams have been working tirelessly to optimize the output of every power plant. GPA's engineers and technical teams continue to prioritize generation projects," states GPA General Manager, John M. Benavente, P.E. The lower weather temperatures and concerted efforts to conserve energy have resulted in decreased power demand through December. "We ask our customers to help us get through this challenging but temporary situation. Your continued support through the Interruptible Load Program and basic conservation measures at your homes and businesses help tremendously. We thank you for your patience," added Benavente.

The PUC commissioners approved the procurement of 40 MW of temporary power generation during its November 30, 2023 meeting, with the emergency procurement issued in December 2023 and a targeted commissioning date of May 2024, barring any other delays. Additionally, GPA has authorized the emergency procurement of supplies, services, and minor construction work to increase generation capacity for the Yigo, Tenjo, Manenggon and Talo'fo'fo diesel generators.

GPA notes that the load shedding outage data for December 2023 demonstrates nominal overall impact.

Load Shedding Data as of Dec. 31, 2023

Actual Outage Days in Dec: 2 days

Avg Hrs/Feeder Lost for Dec: 0.71

Avg Hrs/Feeders Lost since Sep 1, 2023: 14.8 hours

GPA would also like to note that certain feeder descriptions have changed to provide clarity for parts of Anigua, Barrigada, Hagåtña, Mangilao, Mongmong-Toto-Maite, and Sinajana.

GPA continues to encourage customers to conserve energy during peak hours. Simple steps, such as minimizing the use of non-essential electrical appliances such as air conditioning and water heaters between 5 p.m. to 11 p.m. can contribute to the overall stability of the power grid.

GPA appreciates the continued cooperation and understanding of the community as we navigate these temporary challenges together. GPA remains committed to providing reliable and sustainable power to the residents and businesses of Guam.



GPA Receives Grants Supporting Path to 100% Renewable Energy and to Invest in Grid Resilience

Guam is making significant strides towards establishing a renewable, reliable, and secure electric power system. In collaboration with the National Renewable Energy Laboratory (NREL), the Guam Power Authority (GPA) secured a $3 million grant from the Department of Interior Office of Insular Affairs to conduct an in-depth analysis of stakeholder-driven pathways for Guam's clean energy future. This initiative, known as "Guam 100," aims to achieve 50% electricity purchases from renewable sources by 2030 and 100% by 2040. GPA General Manager John M. Benavente emphasizes the opportunity to enhance electricity resilience, create green job opportunities, and reduce costs for customers. Guam 100 will model various scenarios to determine the ideal path for the island's transition to renewable energy.

Inspired by successful models like Los Angeles 100 and Puerto Rico 100, Guam's effort involves a comprehensive analysis process, including stakeholder engagement, data generation, renewable energy scenario development, and impact modeling. The overarching goal is to identify affordable, technically sound, resilient, and equitable pathways to achieve 100% renewable power without compromising the integrity of the electric grid.

Simultaneously, GPA is set to receive $1.7 million as part of a multi-year investment to improve the electric grid's resilience, prevent customer outages, and mitigate the impact of extreme weather events. This funding, granted under the U.S. Department of Energy's Preventing Outages and Enhancing the Resilience of the Electrical Grid program, aligns with the Infrastructure Investment and Jobs Act. The program seeks to modernize the U.S. power grid against natural disasters, supporting projects such as undergrounding electrical equipment, hardening power lines, and implementing adaptive protection technologies.

Approximately 25% of Guam's power customers already receive electricity through underground lines, allowing GPA to operate a portion of the grid during typhoons. With a focus on resiliency, the grant funds will be utilized to underground key transmission lines supplying Guam Waterworks Authority facilities. GPA General Manager John M. Benavente emphasizes the critical importance of grid resilience, particularly highlighted by Typhoon Mawar, and expresses confidence that this investment will strengthen the grid against typhoons and accommodate the island's growing energy demands. Guam anticipates receiving approximately $864,000 annually for five years through this program, with the $1.7 million award covering the first two years.

GPA Applies Latest Energy Credit to All Qualified Accounts

The second installment of the $100 *Prugråman Ayuda Para I Taotao-ta* energy credit program was implemented on December 27, 2023, resulting in savings for customers on their current bills. This $100 credit was applied to all eligible residential and commercial accounts. Notably, the credit for November 2023 represents the second of three credits made possible under Public Law 37-49.

Acting GPA General Manager Tricee Limtiaco stated, "GPA is pleased to announce that November energy credit of $100 was successfully uploaded to all active accounts immediately. We thank DOA for transmitting the funds so our customers can receive the credit during this holiday season when they need it most. Customers can look forward to one more energy credit to their accounts under the current program."

The recent extension of the *Prugråman Ayuda Para I Taotao-ta* energy credit program offers up to $300 in energy credits, disbursed at $100 each month for October through December 2023 billings. On December 26, 2023, GPA received the November 2023 energy credit allotment of $5.27 million from the Department of Administration (DOA) and promptly credited customers' accounts. For details on their credit, customers can check their online accounts.

How To File a Damage Claim



If you believe your electrical appliances and devices have been damaged as a result of power surges, voltage fluctuations or frequency fluctuations in the power supplied by the Guam Power Authority, you can file a claim. The claim must be filed with the Guam Power Authority within 90 days of the alleged damage. If it is determined that the damage to your electrical appliances was caused by something within Guam Power Authority's control, you will receive compensation.

Scan for the application, program info, and FAQs.

GPA GOVERNANCE & LEADERSHIP

Your elected Consolidated Commission on Utilities (CCU) holds two (2) working sessions and one (1) regular meeting monthly. Meeting location is the CCU Conference Room, Gloria B. Nelson Public Service Building in Fadian, Mangilao. For more information and agencies, call the CCU Board Secretary at (671) 648-3002 or visit www.guamccu.org.

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View your energy usage at myenergyguam.com

The Guam Power Authority has been serving Guam for 55 years. Contact us to let us know what updates and information we can provide to help you better understand the work we do; or ways we can better serve you. ***Email us at:*** customersfirst@gpagwa.com or send us a ***Direct Message*** on our Facebook.