Bringing Energy Solutions to You

Insights

A monthly newsletter for all GPA Customers • Issue No. 89 • August 2024

Brighter Days Ahead

Scan the QR code to learn more about how GPA is addressing the generation capacity shortfall.

UPDATES

Addressing Generation Capacity Shortfall

Piti 7 Repair of the Plenum
ECD: December 3, 2023
Capacity: 22MW to 30MW

COMPLETED AHEAD OF SCHEDULE 11/30

Utilizing Existing Battery Energy Storage System (ESS)
ECD: *Available to use in* Feb 2024
Capacity: 16MWH *to be utilized during peak hours*

CURRENTLY IN USE

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

CURRENTLY IN USE

Returning Caterpillar and Wartsila Units to Service
(Tenjo, Talo'fo'fo & Manenggon/Pulantat)
ECD: May 2024
Capacity: 16MW

CURRENTLY IN USE

** 10 of 16MW Completed*

Procuring Temporary Power
ECD: July 2024
Capacity: 20MW

CURRENTLY IN USE

Increasing Existing Cummins diesel units located at Yigo site
Updated ECD: Sept. 2024
Capacity: 14MW

Restoring Capacity for Yigo Diesel units to be placed adjacent to the Tenjo Vista Plant
ECD: September 2024
Capacity: 20MW

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

**ECD is Expected Completion Date*



Guam's Energy Future Approaches

76MW added to the grid

The Guam Power Authority (GPA) continues progress on achieving its goals in addressing the island's energy capacity shortfall and remains committed to ensuring a stable and reliable power supply for Guam. GPA's broad approach and collaborative efforts with partners like Aggreko and Guam Ukudu Power demonstrate a strong commitment to moving energy on Guam into the future.

After the Ukudu Power Plant is commissioned, customers can expect a significant reduction in their power bills. The current rate of 26 cents per kWh will drop to about 13 to 16 cents, saving customers an average of $130 to $102 per bill (savings are highly dependent on the cost of fuel). This reduction is attributed to the retirement of Cabras and the adoption of more efficient generation methods using less expensive fuel. Using more efficient fuel (Ultra Low Sulfur Diesel or ULSD) will result in 879,000 fewer barrels of fuel imports annually.

The current reliance on older baseload generators requires significant consumption of expensive fuel, leading to substantial annual costs. Retiring Cabras 1 & 2 will directly benefit customers by reducing their bills. GPA's long-term goal of providing sustainable and affordable energy has faced challenges, but recent smart investments in solar energy and battery storage will soon deliver the intended direct relief to Guam's families.

PUC Approves 2025 Deadline for Ukudu and GPA's $13.6M Savings Plan for Customers

The Public Utilities Commission (PUC) has granted approval for amendments to the Energy Conversion Agreement (ECA) between GPA and Guam Ukudu Power, LLC (GUP). The amendments, initially approved by the Consolidated Commission on Utilities (CCU) in March, set an accelerated deadline for the Ukudu Power Plant project, which is projected to generate approximately $13,688,556 in fuel cost savings for GPA customers.

John M. Benavente, P.E., General Manager of Guam Power Authority, expressed his appreciation for the PUC's decision, stating, "Rising fuel costs impact every facet of our lives and pose a significant challenge to our island's financial well-being. By securing approval for these amendments, we will not only be lowering energy bills for customers but also providing much-needed relief to families and businesses from continued escalating expenses and keeping those funds in the local economy."

The amendments to the ECA provide for an incentive with an early commissioning date by September 15, 2025 and a strict deadline for completion by September 30, 2025, with penalties imposed for any delays thereafter. This adjustment was necessary due to Typhoon Mawar damaging fuel and water storage tanks.

With an accelerated date for commissioning the Ukudu Power Plant and an overall reduction in costs from $571 million to $527 million, testing is expected to begin by early 2025.

Ukudu Power Plant Progress

The Ukudu Power Plant has recovered from the damages it incurred from Typhoon Mawar. As of June 30, 2024, the project's overall progress, including engineering, procurement, and construction, stands at 88.35%.

Key updates include:

- Completion of hydrostatic testing for large fuel tanks and near-completion of water storage tanks.
- Installation of building sidings, ongoing piping, and electrical activities.
- Successful energization of a new bus and transmission line from the Harmon Substation to the Ukudu switchyard in June.
- Pipeline work is nearly complete with areas along Route 16, Route 6, and Route 1 in Dededo and Piti still ongoing.

Mid-Term Solutions Allow for Big Bump in Capacity

GPA has successfully added 76MW as part of its mid-term plans to address the capacity shortfall. Additionally, the rainy season has brought lower peak demands, providing relief to the system and opportunities for maintenance without impacting necessary reserves.

The Aggreko generators achieved full operational status and integration into the Island Wide Power System (IWPS) as of July 2024. As part of a temporary power agreement, the 20MW power package has been commissioned for 24 months, featuring high-efficiency, ultra-low emission generators. The additional capacity to the IWPS allows GPA teams to provide needed maintenance for generators that have been operating at capacity for the past year.

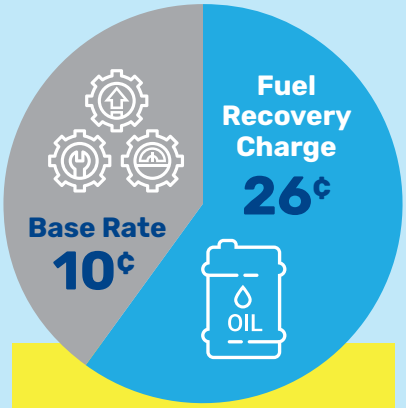
Ongoing mid-term measures also include upgrades to the Manenggon Power Plant and further maintenance to the recently repaired Yigo CT. After returning to service in April, the Yigo CT commenced hot section work on July 23rd. The unit is expected to return to service earlier this month, increasing output from 16MW to 20MW.

PUC Concurs with GPA that the LEAC Should Not Be Increased for Customers

On July 25, 2024, the PUC voted to maintain the Levelized Energy Adjustment Clause (LEAC or Fuel Recovery Charge) at $0.26 through January 2025, as recommended by GPA, to prevent an increase in fuel costs for customers. Despite accumulated underrecovered fuel costs of $20M as of June 30, 2024, GPA has spread these costs over time to protect customers from sudden rate hikes.

GPA remains committed to minimizing the impact of fuel price fluctuations on customers, emphasizing that the LEAC rate solely covers fuel costs for power generation and does not fund operational expenses or debt service. Despite global market pressures, GPA has kept its base rate at $0.10 since 2013, focusing on long-term goals for cleaner, reliable, and more affordable energy.

Scan the QR code to learn more about the fuel recovery cost (LEAC)



The **"fuel recovery charge"** is a pass-through cost that is tied to the price of oil and can make up 2/3 of your power bill.

The **"base rate"** portion (reflected as energy charge) of your power bill pays for utility upgrades, maintenance and operations.

POTENTIAL

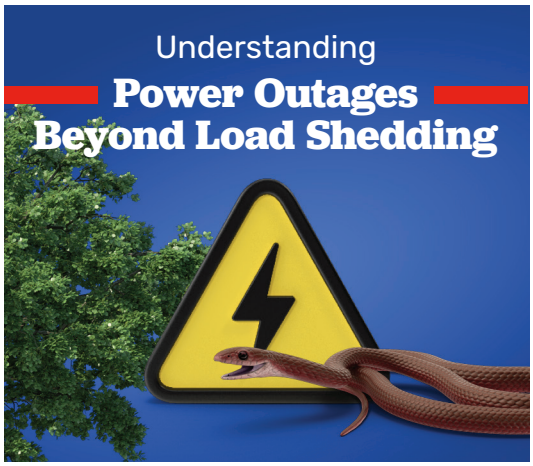
Rotating Power Outage Schedule

AUG/SEP 2024

AVAILABLE ONLINE

GPA is pleased to report that there was no load shedding in July. This achievement reflects the success of the mid-term solutions, and the significant progress made in stabilizing the power grid.

However, as a precautionary measure, the Aug/Sep Rotating Outage Schedule will remain consistent with the previous schedule and will be issued for potential outages only. This schedule helps residents prepare for possible outages should energy demand exceed capacity. The rotating outage schedule is a last resort measure to ensure stability in power supply.



Although there was no load shedding in the month of July, some customers did experience power outages. These outages were not related to the lack of power generation but were due to issues within the Transmission and Distribution (T&D) system. It is important for our customers to understand what types of outages occur and how it affects them.

The T&D system is essential for delivering electricity from power plants to your home or business. It includes two main components: Transmission and Distribution. High-voltage transmission lines transport electricity over long distances from power plants to substations. Substations then reduce the voltage to safer levels for distribution lines, which carry electricity directly to end users. This complex network is designed to ensure reliable and efficient delivery of power.

Here's why outages can happen within this intricate system:

- **Scheduled Maintenance and Repairs:** Regular maintenance is crucial to keep the T&D system running smoothly. This includes inspecting and repairing lines, transformers, and other infrastructure. Scheduled maintenance helps prevent system failures, especially during severe weather or due to wear and tear.
- **Downed or Damaged Power Lines:** Factors like storms, falling trees, and accidents involving utility poles can cause power lines to go down, leading to outages.
- **Vegetation Management:** Overgrown trees and vegetation near power lines can pose risks. We regularly trim trees and clear vegetation to prevent branches from contacting power lines and causing outages.
- **Wildlife Interference:** On Guam, this is one of the most frequent types of outages. Brown tree snakes, birds, cats, etc. can cause interference with power lines and electrical equipment. Studies remain ongoing to understand what attracts wildlife to power lines.
- **Infrastructure and Hardware Issues:** Sometimes, critical components like transformers can fail, resulting in localized outages. We continuously monitor and upgrade these components to maintain system integrity.
- **Voltage Issues:** Problems with voltage levels and transformer malfunctions can also lead to power disruptions. We strive to ensure optimal voltage levels and address transformer issues promptly.

GPA is dedicated to maintaining and enhancing its transmission and distribution infrastructure to ensure a reliable power supply. Our crews are highly responsive to emergency outages, with dispatch available 24/7. We appreciate your patience as we work to respond to T&D issues and address maintenance to improve our service. For power emergencies, please contact our Power Systems Control Center (PSCC) Dispatch at (671) 475-1472/3/4.



My Energy Xpert (MEX) is now available for all residential customers, offering a free, fast, and easy way to evaluate home energy usage and receive personalized recommendations to reduce costs.

"My Energy Xpert underscores GPA's commitment to offering resources that help improve energy efficiency at home and provide cost savings on power bills," said GPA General Manager John M. Benavente, P.E. The tool aligns with GPA's ongoing initiatives, including the My Energy Guam program, the Energy Sense Rebate program, and the Beat the Peak (BTP) campaign, making it a valuable addition to the Energy Sense Program toolkit.

The My Energy Xpert tool allows GPA residential customers to gain insights into their HVAC (Air Conditioning) systems, water heating, lighting, and other major appliances. Using AI algorithms and industry data, MEX provides a comprehensive home energy assessment report in just 5 to 10 minutes.

"GPA is working with key partners such as the University of Guam, Guam Community College, and the Guam Energy Office to promote energy efficiency," said GPA Assistant General Manager of Engineering and Technical Services, John J. Cruz, Jr., P.E. "Through training and collaboration, we aim to encourage our customers to reduce their energy consumption, lower their power bills, and decrease their carbon footprint."

My Energy Xpert is free for GPA residential account holders and only requires a PayGPA account to get started. Customers can access the tool via the GPA Energy Sense website or the My Energy Xpert portal.

For more information, visit GPA's website or follow GPA on social media. To start your online home energy assessment, visit My Energy Xpert and log in with your PayGPA credentials.

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 56 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.