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Starting Oct. 1, 2024, the Palau Public Utilities Corporation (PPUC) will reduce power rates by \$0.012 per kilowatt-hour (kWh) under a new billing system that incorporates a Distributed Energy Rate (DER).

The DER will replace the Automatic Fuel Price Adjustment Clause (AFPAC). According to PPUC, the DER will be based on actual supplier invoices, fuel transportation costs, lubricating oil expenses, and solar energy costs from Independent Power Producers (IPP). The new rate calculation will not include inflation projections.

The DER rate will be set at \$0.277 per kWh across all four billing categories. The base rate will vary depending on customer type, including residential customers using 0-150 kWh, residential customers using 151-500 kWh, residential customers using more than 500 kWh, and commercial or government customers. (By: L.N. Reklai)

KOROR, Palau – The Palau Public Utilities Corporation (PPUC) is undergoing a significant transformation driven by new energy technologies. This shift, centered on merging solar energy with existing diesel-generated power, presents both challenges and opportunities for the island nation.

The move toward renewable energy aligns with Palau’s national climate goals and its commitment to reduce reliance on fossil fuels. The Net Metering Act, passed to incentivize solar adoption, has seen rooftop panels generate a significant portion of the country’s power. According to PPUC, rooftop solar contributed 5% of total energy in 2019, rising to roughly 30% by 2024.

However, integrating these different technologies comes with difficulties. PPUC struggles to track rooftop solar usage and manage excess energy fed back into the system due to its fluctuating nature.

In March 2024, PPUC acquired energy from Palau’s first commercial Independent Power Producer (IPP), a solar company. This allowed them to replace two diesel generators with solar power. While a positive step towards renewable energy goals, the IPP system currently lacks battery storage, limiting its ability to maximize excess energy.

“This is a deliberate decision,” explained Anthony Rudimch, a PPUC engineer, regarding the exclusion of battery storage in the IPP bid. “Owning the storage allows us to control energy release and manage costs more effectively.”

PPUC faces the challenge of integrating these new systems with aging diesel infrastructure. Kennard Sugiyama, manager of PPUC’s Renewable Energy Department, acknowledges the incompatibility between existing infrastructure and solar power. “There’s a lot of behind-the-scenes work to synchronize everything electronically and manually to minimize disruptions,” he said.

President Surangel Whipps Jr. addressed the issue of excess solar production at a press conference in April 2024. “We’re considering pausing solar installations until we have sufficient battery storage or alternative uses for the energy,” he stated.

Despite the challenges, there are signs of progress. Japan’s JICA is assisting with replacing power lines on Babeldaob’s east coast with insulated lines, improving redundancy. Additionally, PPUC is seeking funding for battery storage solutions.

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