

Petition of the Commonwealth Utilities Corporation For Rate Relief in its Power, Water and Wastewater Utilities

**CUC's Testimony of:
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Subject: Testimony as to the Reasonableness of Proposed Power, Water and Wastewater Rate Plan

Transmittal Date: October 31, 2025



Section I – Introduction and Background

Q. Please state your name, position, and responsibilities.

A. My name is Richard Cano. I am the Manager of Power Generation for Saipan. I oversee operation, maintenance, and capital improvements for CUC's power plants on Saipan. This includes staffing, parts and services procurement, fuel and lube management, and project delivery required to meet system load reliably and safely.

Q. What is the purpose of your testimony in this rate case?

A. I am sponsoring the Power Generation portion of CUC's FY 2026 operating and capital budget. My testimony explains why the requested revenues are necessary to:

- Maintain system reliability,
- Address the age and obsolescence of equipment,
- Meet safety and regulatory obligations, and
- Manage rising costs and supply-chain constraints for legacy assets.

The budget reflects a balance of affordability, efficiency, and reliability for all three islands.

Q. Please describe CUC's generation resources on the island of Saipan.

A. Saipan's power supply comes from three generating plants. Power Plant 1 (PP1) has an installed nameplate capacity of 90 MW, but currently produces only 33 MW, which is less than half of its design rating. The maximum annual reliable output of PP1 is approximately 236,783 MWh. **Table RC-1** presents a detailed overview of PP-1.



Table RC-1

Saipan Generation Availability Report			
September 2025			
Power Plant	Capacity		Potential Annual Generation
	Installed MW	Available MW	
PP 1			
D/E 1	7.27	5	35,040
D/E 2	7.27	5	35,040
D/E 3	7.27	5	35,040
D/E 4	7.27	0	Decommissioned
D/E 5	13.04	0	Decommissioned
D/E 6	13.04	0	Mintenance
D/E 7	13.04	9	63,072
D/E 8	13.04	0	Decommissioned
New MAN	8.7	8.7	68,591
Sub Total	89.94	32.7	236,783
S/S Power			3,343

Q. Please explain why PP1's available capacity is less than 50% of its installed capacity.

A. There are several factors that result in the reduced capacity for PP1. These factors include, but are not limited to:

- **Cooling limitations** – Radiators cannot adequately cool engines at maximum output.
- **Age and obsolescence** – Engines are nearly 50 years old. Three have already been decommissioned after catastrophic failures, as it was determined to be uneconomic to fund extensive repairs.
- **Deferred maintenance** – Funding shortfalls forced CUC to operate engines well beyond recommended service intervals

Table RC-2 presents the recommended maintenance intervals for PP1 engines and the time required for the maintenance. Over the last 10 years, CUC did not have the funds to maintain PP1 engines at this schedule.

Table RC-2

Commonwealth Utilities Corporation Required Time for Preventative Maintenance						
	2,000 Hour	4,000 Hour	8,000 Hour	12,000 Hour	24,000 hour	36,000 hour
Engines 1 -3	12 Hours	12 Hours	10 days	21 days	45 days	60 days
Engines 5 - 7	16 Hours	16 Hours	10 days	21 days	45 days	60 days

Table RC-3 presents the installed and available capacity for Power Plant 2 (PP2) and Power Plant 4 (PP4). The reason for the difference between installed capacity and available capacity for PP2 and PP4 are the same as the reasons for the difference between installed capacity and available capacity for PP1.

Table RC-3

Saipan Generation Availability Report September 2025				Saipan Generation Availability Report September 2025			
Power Plant	Capacity		Potential Annual Generation MWH	Power Plant	Capacity		Potential Annual Generation MWH
	Installed MW	Available MW			Installed MW	Available MW	
PP 2				PP 4			
D/E 1	2.5	0	Removed	D/E 2	3.5	0	Decommissioned
D/E 2	2.5	2	0	D/E 3	2.5	2	Maintenance
D/E 3	2.5	0	0	D/E 4	2.5	2	Maintenance
D/E 4	2.5	0	Maintenance	D/E 5	2.5	2	Maintenance
D/E 5	2.5	2	14,016	D/E 6	1	0	Removed
D/E 6	2.5	0	Removed	D/E 7	1	0	Removed
Sub Total	15	4	14,016	D/E 8	1	0	Removed
S/S Power			561	D/E 9	1	0	Removed
				D/E 10	2.5	2	14,016
				Sub Total	17.5	8	14,016
				S/S Power			561

Q. Please explain why CUC chose to rent 12 MW of capacity in Aggrekko engines in late 2019, and continues to rent these engines to this day.

A. By the main reason CUC engaged Aggreko rental power was to support system capacity during the scheduled major overhaul of several PPI generator engines. Unfortunately, the planned maintenance activities did not fully materialize - only two out of three engines was successfully overhauled.

By the time Aggreko's initial contract ended, additional PP 1 engines had already become due for major overhaul because CUC lacked sufficient reserve generation capacity to allow proper maintenance scheduling. At present, multiple PP 1 engines remain overdue for overhaul,

Q. How much has CUC paid Aggreko for engine rental?

A. Through September 30, 2024, CUC has paid Aggreko a total of \$20,488,686 to rent the 12 MW engines required to ensure that CUC will not have to implement rolling blackouts on Saipan. **Table RC-4** outlines the annual payments to Aggreko from FY 2020 through FY 2024. CUC continues to pay Aggreko about \$302,400 per month for engine rental.

Table RC-4

Saipan Aggreko Engine Rental Expense					
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total
\$3,965,555	\$4,104,576	\$4,469,472	\$3,715,483	\$4,233,600	\$20,488,686

Q. Why is CUC forced to operate Aggreko engines?

A. As indicated on page 3 (PPI Capacity), the current generation capacity of PPI has been significantly downgraded, resulting in a shortfall in available power supply. To address this deficiency, two alternative sources are being considered:

1. Utilization of PP2 and PP4 engines, or
2. Contracted generation from Aggreko units

Efficiency Comparison:

- PP2 & PP4 engines: 12 kWh per gallon of diesel
- Aggreko units: 14.4 kWh per gallon of diesel

This shows that Aggreko units are approximately 20% more fuel-efficient than PP2 and PP4.

Operational Reliability:

- PP2 and PP4 engines have shown lower operational reliability, with frequent outages and maintenance issues.

- Aggreko units, being newer and modular, offer higher availability and better performance stability.

Fuel Consumption Impact: If CUC operated PP2 and PP4 instead of Aggreko to compensate for PP1's reduced capacity, I estimate that:

- CUC will consume approximately 1.467 million additional gallons of diesel,
- Resulting in significantly higher fuel costs and potential operational strain.

Given the higher efficiency and reliability of Aggreko units, it is recommended that CUC prioritize Aggreko operation to bridge the PPI capacity loss while minimizing fuel cost and ensuring supply stability.



Q. Please discuss the problems faced by CUC in obtaining parts to overhaul engines at PP1.

A. Because of the advanced age of the engines, replacement parts are no longer in stock by the manufacturer and must be made to order. The time between procurement and delivery on replacement engine parts required for overhauls is between six months and one year. While inconvenient, long lead times for parts required for overhauls can be managed for planned or scheduled maintenance. However, in the event of engine breakdowns or forced outages, the delay in acquiring replacement parts places CUC at serious risk of not being able to serve Saipan's load.

In general, diesel engines can be rebuilt and overhauled indefinitely as long as parts are available from the manufacturer. It is easy to find examples of large diesel engines still in operation that are over 70 years old. More broadly, the decision to rebuild or replace PP1 engines involves weighing several factors, including but not limited to:

- OEM part availability
- Fuel and lube efficiency
- Cost and frequency of overhauls
- Modern monitoring/control technologies
- Labor costs, reliability, and emissions

Q. Please discuss the concept of reserve margin and its importance to the people and businesses of the CNMI.

A. Reserve margin is generally defined as the amount of unused available generating capacity, in MW, of an electric power system at the time of its peak load as a percentage of total capability. Electric utilities require reserve margins of extra generation capacity for many reasons, such as the need to meet peak demands and the need to cover unanticipated incidents when power plants are forced to shut down. The extra generation capacity provides protection against brownouts and blackouts, a phenomena the people of Saipan experienced frequently in 2008



1 and 2009, and occasionally since then (excluding the two typhoon related outages, which are
2 not classified as reliability events).

3
4 Typically, interconnected electric utilities on the US Mainland seek to maintain reserve margins
5 of at least 15 percent, meaning they have 15 percent extra capacity at any time in their system
6 peak demand in case of unplanned generation outages. For island utilities like CUC that are
7 not interconnected with other utilities, a reserve margin of 50% to 75% is not uncommon
8 because unlike interconnected utilities they cannot purchase electricity from other utilities in
9 times of emergencies.

10
11 **Q. What is CUC's reserve margin on the island of Saipan for the twelve-month period**
12 **October of 2025 through September 2026?**

13 **A. Table RC-6** presents CUC's monthly available generation capacity, monthly peak demand and
14 monthly reserve margin for October 2025 through September 2026. This is the test year for
15 the rate plan presented for approval. CUC projects a test-year peak demand of 40.8 MW. On
16 that basis, the system reserve margin is approximately **39%**—at the lower bound of prudent
17 practice for an isolated system with aging units and elevated forced-outage risk. This margin is
18 achievable only because the 8.7-MW MAN unit entered service in March 2025. In the five
19 years prior to that addition, Saipan's reserve margin averaged roughly 18%, which was
20 inadequate for reliable operations given unit condition and maintenance constraints. During
21 that period, CUC relied on Aggreko rental generation to maintain service; absent that
22 temporary capacity, CUC would not have been able to reliably meet Saipan's load.

23
24 **Table RC-6**



COMMONWEALTH UTILITIES CORPORATION			
Saipan			
Monthly Available			
Month	Generation Capacity	Projected Peak Demand	Reserve Margin
Oct-25	56.7	39.40	
Nov-25	56.7	39.20	
Dec-25	56.7	37.40	
Jan-26	56.7	35.90	
Feb-26	56.7	33.00	
Mar-26	56.7	34.10	
Apr-26	56.7	37.30	
May-26	56.7	40.80	
Jun-26	56.7	39.30	
Jul-26	56.7	39.50	
Aug-26	56.7	40.40	
Sep-26	56.7	40.40	
Totals	56.7	40.80	39%

Q. What is the total Power Generation budget for FY 2026, and how is it organized by major cost category?

A. The FY 2026 budget is \$116.0 million. This total is presented in more detail in Economists.com's prefiled testimony. However, key categories include:

- Fuel & Lube: \$65.0M (handled under the FAC proceeding)
- Personnel: \$6.84M (150 FTE)
- Maintenance: \$16.45M + \$1.125M (stipulated order)
- Purchased Power: \$4.5M
- Capital Outlay: \$18.98M
- Other O&M and regulatory fees: ~\$4.8M

Q. What are the primary cost drivers that are necessitating CUC's request for a rate increase?

A. The dominant drivers are:

- Capital projects to restore dependable capacity and harden facilities
- Purchased power bridging needs while units undergo overhaul

Q. Please summarize CUC's FY 2026 Power Generation budget priorities.

1 A. I would characterize CUC's budget priorities as follows:

- 2
- 3 • **Saipan:** \$8.8M for PP1/PP2/PP4 overhauls and stipulated order compliance; \$4.5M purchased
 - 4 power; \$10.1M capital outlay including two new 3–3.5 MW units.
 - 5 • **Tinian:** \$8.5M maintenance (Wärtsilä and EMD overhauls, PLC upgrades, building/roof
 - 6 hardening); \$3.3M capital outlay for safety equipment, IT, and facility repairs.
 - 7 • **Rota:** \$250k for essential maintenance; \$2.5M capital outlay for a new 2.5 MW generator to
 - 8 replace overdue overhauls.
 - 9

10 CUC's Power Generation division is undertaking a detailed economic analysis to compare the
11 life-cycle costs of maintaining the existing Saipan generating units with the costs and benefits
12 of procuring and installing new 3–3.5-MW engines. The analysis is expected to be completed
13 by **October 31, 2025**. Once finalized, CUC will file the results with the CPUC as supplemental
14 testimony or as a formal report.
15

16 **Q. How does the Personnel budget support reliable 24/7 operations?**

17 A. The budget funds the staffing necessary to operate, maintain, and secure generation facilities
18 around the clock on three islands. The total FTEs are 118 on Saipan, 17 on Tinian, and 15 on
19 Rota. This covers operators, mechanics, electricians, instrumentation and controls, and
20 supporting roles. Competitive staffing is vital to reduce forced-outage rates and execute
21 planned maintenance safely and on schedule. The FY 2026 total Personnel expense is
22 \$6.84M.
23

24 **Q. What is the "Maintenance—Stipulated Order" line item? Why is it necessary?**

25 A. Saipan includes \$1.125M to address stipulated-order items (TMO-related), which are required
26 remedial tasks tied to compliance and safe operations. Funding these activities is not
27 discretionary; it is necessary to meet obligations and mitigate risk while longer-lead capital
28 solutions are implemented.
29

30 **Q. Why is "Purchased Power/Other Production" included, and how will it be used?**

31 A. The \$4.5M purchased-power allowance enables CUC to meet demand when in-house units
32 are taken out of service for major overhauls or repairs. This is a prudent reliability and cost
33 measure. It avoids running distressed units to failure, reduces emergency rentals, and
34 supports disciplined outage/overhaul scheduling.
35



Q. How do these expenditures protect customers and the economy?

A. They reduce outage risk by restoring dependable capacity through overhauls and targeted new units, addressing safety and facility integrity through roof/building hardening, and ensuring availability of critical spares for legacy engines facing parts obsolescence. Together, these measures stabilize operations while longer-term resource additions progress. This directly supports customer affordability and economic continuity in CUC's three-island system.

Q. What near-term results should the Commission expect from this budget?

A. With timely funding, I believe CUC will accomplish the following:

- complete scheduled Saipan DE6 and EMD overhauls
- execute the Tinian Wärtsilä overhauls and PLC work
- place a new 2.5 MW unit for Rota into procurement
- advance facility hardening on Tinian
- reduce emergency repairs and forced outages by securing critical spares

These actions are expected to improve availability, reduce unplanned outages, and increase the likelihood that we can reduce or eliminate the Aggreko rental costs.

Q. What accountability measures will you use to manage these funds?

A. Power Generation intends to complete the following tasks:

- competitively source parts and services where feasible
- adhere to OEM specifications for overhauls
- track budget-to-actuals monthly by island and unit
- report key reliability metrics (availability, forced-outage rate, and maintenance compliance), and
- document major variance drivers for Commission and Board oversight.

These practices are intended to ensure prudence and transparency in execution.

Q. What is your recommendation to the CPUC?

A. I recommend that the CPUC approve the requested Power Generation funding within CUC's revenue requirement. The FY 2026 plan is targeted, needs-based, and disciplined. It addresses immediate reliability risks posed by aging assets and parts obsolescence, advances



1 safety and facility integrity, and prudently bridges capacity while units are restored. These
2 actions that are firmly in the public interest.

3

4 **Q. In closing, we have a couple of housekeeping questions. Did you prepare this**
5 **testimony and exhibits, or were they prepared under your supervision and control?**

6 A. Yes.

7

8 **Q. Are the statements in your testimony true and correct to the best of your knowledge,**
9 **information and belief?**

10 A. Yes.

11

12 **Q. If you were testifying live, under oath, today, would you say what appears in this, your**
13 **prefiled testimony filing?**

14 A. Yes.

15

16 **Q. Does this conclude your prefiled testimony?**

17 A. Yes, it does. However, we reserve the right to make any necessary adjustments during the
18 course of these proceedings.

19

20

21

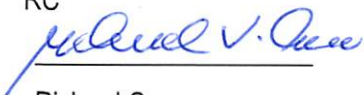
22 DECLARATION

23

24 The proceeding prefiled testimony, and the exhibits referred to therein, are true and correct to the
25 best of my knowledge, information and belief. Signed under penalty of perjury.

26

27 RC

28 

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