



Authority's Decision and Commission Order

Case U-0001-25

In the Matter of VANPAWA Limited's Electricity Tariff Review for Malekula and Tanna Concessions

August 2025

Executive Summary

The Vanuatu National Power and Water Authority Limited (VANPAWA), a subsidiary of the Vanuatu National and Provident Fund (VNPF), operates the electricity concessions of Malekula and Tanna islands in accordance with the Electricity Concession Deeds for each of the respective Concessions as entered by VNPF with the Vanuatu Government on 6th May 2022.

VANPAWA's 20 years Concession Deed outlines the Operator's responsibilities in providing electricity in Malekula and Tanna.

The Authority has undertaken an extensive tariff review and determination process, aligning the requirements of the Operator to the Concession Deed which had commenced in June 2025.

A uniform base tariff of 64.29 Vatu per kilo watt hour (Vatu/kWh) is determined and is issued by the Utilities Regulatory Authority (the Authority) to VANPAWA. This is only a 0.94% decrease in tariff to VANPAWA's currently applied uniform tariff of 64.89 Vatu/kWh.

The Authority is also issuing a Tariff Adjustment Formula to VANPAWA to adjust the base tariff monthly for fuel cost and renewable energy generation in both concessions.

Furthermore, the Authority has revised and is issuing a new Customer Category billing determinant (billing coefficients) to VANPAWA to also implement as part of this tariff determination. Details are provided within this report.

Force Majeure provisioning is collectively considered by VANPAWA and the Authority, hence as part of this tariff determination, VANPAWA customers are to also contribute to a Force Majeure fund at a rate of 1.32 Vatu/kWh.

The Authority's final base tariff determination of 64.29 Vatu/kWh is derived from a total allowed Revenue Requirement (net) amount and forecasted demand of:

Table 1 Final Base Tariff components

	Unit	Total Amount
Revenue Requirement (net)	Vatu	211,310,024
Demand (Tanna and Malekula)	Kilo Watt Hours (kWh)	3,287,021
Base Tariff (uniform)	Vatu/kWh	64.29

Source: The Authority

The Commission is confident that the forecasted amounts and the determined final tariff is reasonable to enable VANPAWA to undertake its obligations under its Tanna and Malekula Concession Deeds and operates efficiently. This new uniform base tariff shall be applied by VANPAWA in Tanna and Malekula electricity concessions for a period of one year.

All in all, the Authority's Commission acknowledges VANPAWA's cooperation during this tariff review process and looks forward to VANPAWA's improved service reliability in Tanna and Malekula electricity concessions whilst also improving its staff institutional capacity.

Mr. Jesse Benjamin, Chief Executive Officer (CEO) & Commissioner

Mr. John Chaniel, Chairman

Mr. Jerry Lapi, Part-time Executive Commissioner

Table of Contents

Executive Summary.....	2
Purpose & Structure of this document	4
Legal requirements & framework.....	4
Tariff Setting Period & Effective Date	5
Part 1: VANPAWA's new Uniform base tariff.....	5
I. New Base Tariff (P ₀) of 64.29 Vatu/kWh	5
II. Demand Forecast	6
III. Generation Cost.....	6
IV. Operational Expense.....	7
V. Rate of Return	7
VI. Regulatory Asset Base (RAB)	8
VII. Working Capital	8
VIII. Return on Investments.....	8
IX. Non-electricity sales revenue	9
Part 2: Monthly Tariff Adjustment Formula.....	10
Part 3: Customer Category Tariff Structure.....	12
X. New Customer Category Tariff Structure	12
Part 4: Force Majeure Fund Customer Contributions.....	13
Notice of Grievance	14

List of Tables

Table 1 Final Base Tariff components	2
Table 2 Case information	4
Table 3 Breakdown of New Uniform Base Tariff Calculation.....	6
Table 4 Generation Cost components allowed by the Authority.....	7
Table 5 Computation of Working Capital	8
Table 6 VANPAWA's Return on Investment	9
Table 7 VANPAWA's non-electricity sales revenue.....	9
Table 8 New Customer Tariff Structure	12

List of Figures

Figure 1 VANPAWA's Rate of Return at 8.44%	8
--	---

Table 2 Case information

Case number	U-0001-25
Applicant	Vanuatu National Power and Water Authority (VANPAWA)
In the matter of	VANPAWA's Electricity Tariff Review for Malekula and Tanna Electricity Concessions
Commencement date	6 th June 2025
Preliminary Tariff	7 th August 2025
Final Decision & Commission Order	14 th August 2025

Purpose & Structure of this document

This document provides details of the Utilities Regulatory Authority's (the Authority) complete electricity tariff determination for the Vanuatu National Power and Water Authority (VANPAWA). This is the first full tariff review for VANPAWA where the utility's actual operational costs and investments in the last 19 months are utilized in this tariff review exercise.

VANPAWA's electricity tariff determination is a cluster of the following components hence this report is structured as follows:

- Part 1: New base tariff
- Part 2: Monthly Tariff Adjustment Formula
- Part 3: New Customer Category Billing Structure
- Part 4: Force Majeure Fund Customer Contributions

Legal requirements & framework

The Authority is established as the independent regulator of electricity and water services in Vanuatu and is authorized under the *Utilities Regulatory Authority Act No.11 of 2007 (as amended)* (the Act), among other matters, to:

- Ensure the provision of safe, reliable and affordable regulated services;
- Maximize access to regulated services throughout Vanuatu; and
- Promote the long-term interest of consumers.

Section 18 of the Act empowers the Authority to determine the maximum price a utility can apply to its customers for a regulated service(s). Accordingly, the Authority is authorized to determine the maximum tariff to be charged and such determination is effective from the date of its gazettal.

In determining the maximum price, the Authority is to have regard to price of similar services in any comparable location and also consider taking into account least cost generation for the particular utility.

Furthermore, section 13 of the Act provides for the general power of the Authority. Subsection 13(1) provides for the power of the Authority “*to do all things that are necessary or convenient to be done for or in connection with the performance of its functions.*”

While the above provision of the Act sets out the basis for the Authority to conduct a tariff review, the exercise was conducted with due consideration of the existing Concession Deeds signed between the Vanuatu Government and VNPF¹ on 6th of May 2022 for a duration of 20 years.

The Deeds outline the obligation of both parties (Government and VANPAWA) to the agreement but also recognizes the authority of the Regulator and the supremacy of the URA Act.

With consideration to the above legal framework and other provisions of the URA Act and the Law in general, the Authority conducts this tariff review exercise.

Tariff Setting Period & Effective Date

The tariff setting period for VANPAWA’s new tariff including the tariff adjustment formula and the updated Customer Category billing structure is 12 months. The tariff is effective upon approval of the tariff determinations by the Authority’s Commission and formal notification by the Authority authorizing VANPAWA to commence implementation of the new uniform base tariff.

While upfront approval is provided to VANPAWA, the Authority is responsible to ensure gazettal of VANPAWA’s new uniform tariff including the tariff adjustment formula, revised customer category and customer contributions to Force Majeure Fund.

Part 1: VANPAWA’s new Uniform base tariff

I. New Base Tariff (P_0) of 64.29 Vatu/kWh

The Authority has applied the Rate of Return tariff setting methodology in determining VANPAWA’s new uniform base tariff. The new uniform base tariff is 64.29 Vatu/kWh. As it is a uniform base tariff, this rate shall be applied by VANPAWA in both Malekula and Tanna Concessions.

The 64.29 Vatu/kWh base tariff is only 0.94% lower than VANPAWA’s formerly applied tariff of 64.89 Vatu/kWh. The former tariff of 64.89 Vatu/kWh, issued in May 2023 by the Authority to VANPAWA was based on the former utility operating the two concessions financial and technical data. It was mostly based on estimated figures.

This new tariff is based on VANPAWA’s actual operational costs and network data for the past 19 months of operations.

The composition of the new uniform base tariff of 64.29 Vatu/kWh is as tabled below.

A total net required revenue amount for VANPAWA of Vatu 211,310,024 is computed and divided by a total forecasted demand for power of 3,287,021 kWh to determine the new uniform base tariff figure of 64.29 Vatu/kWh.

¹ Vanuatu National Provident Fund, VANPAWA’s parent company

The Authority strongly believes that with this rate VANPAWA should be able to achieve its core objectives which is on improving staff institutional capacity and service reliability within the 12 months period.

Table 3 Breakdown of New Uniform Base Tariff Calculation

		URA Final Tariff Determination	Composition of the Final Base Tariff in Vatu/kWh	Composition of the Final Base Tariff in %
Generation Cost	Vatu	91,536,771	27.85	43%
Equipment and Materials	Vatu	9,474,846	2.88	4%
Subcontract Costs	Vatu	29,581,976	9.00	14%
Office and Administration Expenses	Vatu	1,503,641	0.46	1%
Personnel Costs (Staff Wages/Salaries)	Vatu	52,272,308	15.90	25%
Repair and Maintenance	Vatu	947,485	0.29	0%
Vehicle Repair & Maintenance and Fuel	Vatu	2,021,967	0.62	1%
Depreciation	Vatu	5,126,676	1.56	2%
Insurance	Vatu	1,985,542	0.60	1%
Provision for Doubtful Debts	Vatu	4,155,201	1.26	2%
Force Majeure Provision	Vatu	-	-	0%
Technical Support- Hydro	Vatu	-	-	0%
Travel Expenses	Vatu	2,013,265	0.61	1%
ADB Loan Repayment - Brenwei Hydro	Vatu	-	-	0%
Total Operating Cost	Vatu	200,619,678		
Return on Investment	Vatu	11,638,892	3.54	6%
Total Revenue Requirement	Vatu	212,258,569		
Non-electricity sales revenue	Vatu	948,545		
Net Revenue Requirement	Vatu	211,310,024		
Demand	kWh	3,287,021		
Base tariff (New)	Vatu/kWh	64.29		

Source: The Authority

II. Demand Forecast

The Authority has forecasted a total aggregate demand figure of 3,287,021 kWh. Electricity demand for Malekula is projected at 1,630,210 kWh with an anticipated customer base of 1,207. On the other hand, Tanna customer demand for electricity is forecasted at 1,656,810 kWh and customer number is 1,230.

The projected demand figures in kWh is units of electricity that VANPAWA is expected to have been sold by the end of the 12 months period (tariff setting period).

III. Generation Cost

Generation Cost refers to fuel cost for both Tanna and Malekula concessions. The Authority has allowed a total amount of Vatu 91,536,771 as generation cost in the tariff. This is 43% of the total net required revenue amount.

Although there are renewable energy generation sources in Tanna (solar) and Malekula (hydro), the Authority has considered a 100% diesel generation mix in meeting the forecasted demand. This is because based on data and information received and analyzed by the Authority, the current renewable energy generation sources are either not operational or operating infrequently, leading to very limited data to use and forecast.

The Authority is issuing a monthly tariff adjustment formula to adjust the base tariff for changes in fuel costs and intake of renewable energy generation. The tariff adjustment formula is detailed in Part 2 of this report.

The below table outlines the total litres of fuel that VANPAWA will require to purchase and use in generating electricity in 12 months, the diesel generator heat rate ratio, the fuel price per litre amount (used June 2025 price) and VANPAWA's total fuel cost.

Table 4 Generation Cost components allowed by the Authority

		Malekula	Tanna	Total
Fuel Litres	Litres	266,114	476,156	
Heat Rate	Litre/kWh	0.2545	0.2545	
Fuel Price per Litre	Vatu/Litre	123	123	
Fuel Cost	Vatu	32,817,213	58,719,558	91,536,771

Source: The Authority

As of June 2025, Malekula Concession has the following generation sources: Brenwei Hydro (total 700 kVA installed capacity), Thermal/Diesel (1,030 kVA installed capacity) and Solar² (18 kWp). For Tanna concession, there is Solar³ (20 kWp) and Thermal/Diesel (1,400 kVA installed capacity).

Based on production data, VANPAWA's thermal/diesel generators in both concessions are not operating in full capacity. VANPAWA has conveyed to the Authority the challenges it is facing, however, VANPAWA confirms that it will address these issues and aim to improve service reliability in both Malekula and Tanna concessions.

IV. Operational Expense

A total operational cost amount of Vatu 200,619,678 is allowed which covers for generation cost and non-generation costs. VANPAWA's non-generation cost amount allowed is Vatu 109,082,907. The detailed cost breakdown for operating cost is provided in table 3 above which includes items such as equipment and materials, subcontracting service costs, office and administrative expenses, Staff salaries, repair and maintenance and so on.

VANPAWA's assets are depreciated using the straight line method of depreciation. Total annual depreciation amount included in the operational expense amount is Vatu 5,126,676.

V. Rate of Return

VANPAWA's sources of capital financing is Equity (70%) and Debt (30%). The utility's cost of debt is 6%. Applying the Weighted Average Cost of Capital (WACC) methodology, the Authority has determined a 8.44% (nominal WACC) rate of return on investment. for VANPAWA.

² Solar has been out of service since May 2023

³ Had been out of service since May 2023. Started operating in January 2025.

Figure 1 VANPAWA's Rate of Return at 8.44%

Return on Equity		Return on Debt	
Nominal risk free rate	5.20%	Nominal risk free rate	
Market risk premium	3.94%	Country risk premium	
Country risk premium	4.27%	Debt margin	6%
Market rate of return	3.94%	Return on debt (pre-tax)	6.00%
Asset Beta	0.48%		
Debt ratio	0.3	Nominal WACC	8.44%
Equity ratio	0.7		
Return on Equity	9.49%		

Source: The Authority

VI. Regulatory Asset Base (RAB)

The Authority has valued VANPAWA's regulated asset base at Vatu 115,396,097. This is VANPAWA's net book asset value as at December 2024.

VII. Working Capital

VANPAWA's working capital is determined by the Authority using the 45-day billing approach instead of 60 days. This change of approach is due to data and records showing significant uncollected bills from customers during the last 19 months of VANPAWA operations.

The total working capital for VANPAWA is Vatu 22,470,704. Details are provided in table 5.

Table 5 Computation of Working Capital

	Amount (Vatu)
Generation Cost	91,536,771
Equipment and Materials	9,474,846
Subcontractor Costs	23,439,576
Office and Administrative Costs	1,503,641
Personnel Costs	52,272,308
Vehicles Repair and Maintenance & Fuel	4,035,232
Annual Requirement	182,262,373
45/365 days Approach	12.33%
Working Capital	22,470,704

Source: The Authority

VIII. Return on Investments

The Authority has determined and allowed in the tariff a reasonable return on investment amount of Vatu 11,638,892 to VANPAWA. This is as calculated in table 6.

Table 6 VANPAWA's Return on Investment

Year	Units	2025-2027
Regulated Asset Base (net book value)	Vatu	115,396,097
Working Capital	Vatu	22,470,704
Total Regulated Asset Base (incl. Working Capital)	Vatu	137,866,801
Return on Investment (Rol) Rate	%	8.44%
Return on Investment (Reasonable Compensation)	Vatu	11,638,892

Source: The Authority

IX. Non-electricity sales revenue

The underlying notion in reducing the total revenue requirement amount by the non-electricity sales revenue amount is because these are revenues that the utility has earned from its other services, such as new connections and re-connections. VANPAWA has used the regulated services resources as paid for under the tariff (such as personnel costs) to conduct these other non-electricity sales services.

The Authority has reduced VANPAWA's total required revenue amount by Vatu 948,545.

Table 7 VANPAWA's non-electricity sales revenue

Other Services	Monthly, Vatu	Annual, Vatu
New Connections	65,000	780,000
Re-connections	14,045	168,545
Total Non-tariff revenue	79,045	948,545

Source: The Authority

Part 2: Monthly Tariff Adjustment Formula

Fuel cost is a primary cost component that is subject to constant changes. A monthly tariff adjustment formula, as outlined below, is issued to VANPAWA to implement.

Provided below is the monthly tariff adjustment formula for VANPAWA:

$$P = P_0 \times ((0.43 \times ((G/G_0) \times (N/N_0)) + 0.57) + PPA)$$

Where:

P₀	Base Tariff
P	Adjusted Tariff (Monthly)
G	is the variable that calculates the evolution of the weighted unit cost of diesel, copra oil, and lubricant oil
N	is average proportion of power generated from thermal generation (diesel and copra oil) and is calculated as a ratio of thermal generation in overall generation.
PPA	is the total amount of power purchase invoices accrued, expressed in Vatu, over the trailing twelve months.
P₀	64.29 Vatu/kWh
G₀	27.85 Vatu
N₀	1

Calculation of G, N and PPA

G	$G = (HR_g \times (G_v \times L_g) / L_g) + (LO \times HR_{lo})$
	HR_g is the nominal heat rate for diesel generation. It differs for each concession.
	HR_{lo} is the nominal heat rate for lubricant oil. It differs for each concession.
	L_g is the total number of litres of diesel oil consumed by Tanna and Malekula power stations, expressed in litres, in the month preceding the calculation of G
	G_v is the weighted average cost of diesel fuel, expressed in Vatu per liter, delivered to the Tanna and Malekula power stations. It is calculated by computing the total amount of accrued diesel preceding the calculation of G invoices received in the month and dividing it by the number of litres of diesel appearing on those invoices.
	LO is the weighted average cost of Lubricant Oil (LO), expressed in Vatu per liter, delivered to the Tanna and Malekula power stations. It is calculated by computing the total amount of accrued Lubricant Oil invoices received in the month preceding the calculation of G and dividing it by the number of liters of Lubricant Oil appearing on those same invoices. Should there be no given purchases of Lubricant Oil made during the month preceding, the value of LO from the previous month in which Lubricant Oil purchases occurred shall be used instead.

N	$N = \frac{kWhTh_{TTM}}{kWhTot_{TTM}}$
	kWhTh_{TTM} is the total number of kilowatt-hours produced by VANPAWA thermal generation power plants, expressed in kilowatt-hour generated. It is calculated and updated once a month based on the sum of the trailing twelve months (TTM). The trailing twelve months are counted from (and including) the month preceding the tariff adjustment.

	<p><i>kWhTotTTM</i> is the total number of kilowatt-hours generated by VANPAWA from all technologies and power plants (excluding power purchased from IPP), expressed in kilowatt-hour generated. It is calculated and updated once a month based on the sum of the of the trailing twelve months (TTM). The trailing twelve months are counted from (and including) the month preceding the tariff adjustment.</p>
PPA	$PPA\ Cost = \sum_{m=1}^{12} PPA\ Cost_m$
	<p>The trailing twelve months for this variable are calculated from (and including) the second month preceding the tariff adjustment.</p>

Part 3: Customer Category Tariff Structure

X. New Customer Category Tariff Structure

The Authority has made revision to VANPAWA's customer category tariff structure. The new customer tariff structure promotes affordability and is designed to ensure VANPAWA recovers its total net required revenue amount of Vatu 211,310,024 as allowed by the Authority in this tariff determination.

VANPAWA has a diversified customer base. In both Malekula and Tanna, there are Small Domestic, Private Low Voltage, Business, High Voltage and Public Lighting customer categories.

With the final tariff of 64.29 Vatu/kWh, the new customer charges or billing determinants to be applied to the customer categories are as follows:

Table 8 New Customer Tariff Structure

Customer Category	kVA	Amps	New Fixed Rate (FC) [FCxPxPerSubscribed kVA]	New Variable Rate (VC) [PxVCxkWh]
Small Domestic	1.1-2.2	5-10A	0	0.80
	3.3-4.4	15-20A	0	0.80
	5.5-6.6	25-30A	2	1.00
Private Low Voltage	1.1-2.2	5-10A	0	1.00
	3.3-39.6	15-60A	3	1.12
Business Customers	2.2-39.6	10-60A	2	1.00
High Voltage Customers	26.4+	45+	5	0.80
Public Lighting	2.2-6.6	10-30A	0	0.80

Source: The Authority

According to the above table, VANPAWA will be billing its customers each month as follows:

- **Small Domestic Category:**
 - o Small Domestic customers with meter subscriptions from 1.1 kVA to 4.4 kVA, VANPAWA will issue billing for only their electricity consumption. Variable Rates to be applied depends on customer's meter subscription (amperage) as tabled.
 - o Small Domestic subscribers with 5.5-6.6 kVA, VANPAWA will issue billing on Fixed Charge and Variable Charge. Fixed Charge is 2 multiplied by VANPAWA's adjusted base tariff (P) multiplied by per subscribed kVA. Variable Charge is 1.00 rate multiplied by the adjusted base price (P) and total kWh consumed.
- **Private Low Voltage Category:**
 - o Private Low Voltage customers with meter subscription of 1.1-2.2 kVA, will only incur Variable Charge.
 - o Private Low Voltage customers with meter subscription of 3.3-39.6 kVA, will on their bills receive both Fixed and Variable Charges as tabled above.
- **Business and High Voltage Customers:**
 - o Business and High Voltage Customers with subscriptions as tabled above, shall receive both Fixed and Variable Charges.
 - o High Voltage Customers bear the highest Fixed Charge Rate.

- **Public Lighting**

- VANPAWA shall only apply a Variable Charge of 0.80 of the adjusted base price for public lighting.

For customers being billed on variable charges of less than 1, such as the 0.80 for public lighting and small domestic 1.1-4.4 kVA, these customers are receiving subsidy from other customers. They are not paying the full cost to VANPAWA for producing one unit of electricity. The Authority has allowed a customer cross-subsidization mechanism in this newly issued customer category tariff structure.

Part 4: Force Majeure Fund Customer Contributions

Force Majeure refers to Acts of Gods, such as cyclones, earthquakes and so on. VANPAWA's proposition to include a force majeure provision in the tariff is considered by the Authority. However, the treatment of Force Majeure differs to what is being proposed by the regulated entity.

The new uniform base tariff of 64.29 Vatu/kWh does not include Force Majeure Provision. This is because force majeure is not a direct operational cost for the utility.

The Authority is allowing customers to contribute at a rate of 1.32 Vatu/kWh towards Force Majeure. This will be a separate line item on customer bills, clearly outlined as Customer Contribution- Force Majeure.

Total Vatu amount to be paid by a customer on Force Majeure is calculated as: Rate 1.32 x total kWh consumed in the period billed.

Notice of Grievance

If the utility or any affected person is aggrieved by the Authority's Final Decision and Commission Order, it may request the Authority to reconsider the decision on issues aggrieved upon. A Notice of Grievance must be submitted within 30 days of the Order's gazettal. The Notice should contain:

- The issue or issues being contested
- A detailed description of any facts or matters supporting the grievance
- Copies of any documents supporting the grievance
- A detailed description of any alleged error of law or fact
- A detailed description of any relevant change in facts or circumstances since the Authorities Final Decision.

A Notice of Grievance can be addressed to:

Mr. Jesse Benjamin
Chief Executive Officer
Utilities Regulatory Authority

The Notice may be:

- *Delivered in person to the URA Main Office in Port Vila or URA North Branch in Luganville at the following addresses:*

<u>Port Vila Head Office:</u> Utilities Regulatory Authority (URA) Rue de Languedoc No.2 Area Port Vila, Efate Vanuatu	<u>North Branch Office:</u> Utilities Regulatory Authority (URA) VNPF Building (Top floor) Boulevard Higginson Street Luganville, Santo Vanuatu
--	---

- *Mailed to:*
Case U-0001-25
Utilities Regulatory Authority
P.M.B 9093
Port Vila
Vanuatu
- *Or Email to:*
Ms. Belinda Reuben
Manager Corporate, URA
breuben@ura.gov.vu

If the Authority receives a timely Notice of Grievance, it will conduct a review in accordance with Section 27 of the URA Act. If upon review the Authority determines that the grievance is justified, then it shall revoke, amend or vary the decision on the matter complained of.

The URA office can be contacted by telephone at +678 23335.