

2023-2024 BPC
Electricity Tariff
Application
Consultation Paper



BOTSWANA POWER CORPORATION

**ELECTRICITY TARIFF ADJUSTMENT
APPLICATION FOR THE 2024 FINANCIAL
YEAR (2023/24).**

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I. BACKGROUND

- 1.1 Botswana Power Corporation (BPC) was formed in 1970 by an Act of Parliament (Botswana Power Corporation's Act, CAP 74:01), and is responsible for the generation, transmission, and distribution of electricity within Botswana to areas approved by the Ministry of Minerals and Energy (MME). It is regulated by the Botswana Energy Regulatory Authority (BERA).
- 1.2 The Corporation has formulated its new five-year strategic plan which commenced in the financial year 2022 (2021/22) and ends in the financial year 2026 (2025/26). The strategy vision is to ensure that BPC becomes a regional benchmark in electricity supply that powers Botswana economy by supplying reliable, safe, competitive, and sustainable electricity.

2. UNAUDITED FINANCIAL PERFORMANCE FOR THE YEAR ENDED 31ST MARCH 2022

2.1 Profitability

The financial results for the unaudited year ended 31 March 2022 show a Total Loss of P486.934 million against audited Net Profit before tax of P365.187 million in the previous financial year. These results reflect a decline of P852.121 million (233%) due to increase in Direct Input Costs of P544.581 million (23%) and an increase of P387.484 million (20%) in Total Administration Expenses, despite a growth in Operating Income of P60.061 million (1%). In addition, the financial items recorded a reduction of P20.681 million (20%).

The Net Profit of P365.187 million in the prior year included P153.878 million, being a once off extra ordinary income that is not expected to be earned again which was from a settlement agreement with one major contractor. Therefore, the March 2021 profit, exclusive of the income from the Settlement Agreement, was P211.309 million.

2.2 Operating Income

2.2.1 The Corporation recorded Sales Revenue of P4.336 billion compared to P4.021 billion in the prior year. The growth of P314.995 million (8%) was mainly attributed to the growth in sales due to an increase in energy consumption and the 3% tariff increase awarded in the financial year 2021/22.

2.2.2 The Mining Sector Income increased by P165.002 million to P798.816 million in 2022 due to higher energy consumption as the global impact of

COVID-19 pandemic lessened and the opening of a new copper mine. The Non-Mining Sector income of P3.537 billion was higher than the P3.387 billion recorded in the previous year on account of gradual recovery from the pandemic.

- 2.2.3 Other Income reduced to P71.738 million from P326.672 million in 2021 mainly driven by the once-off extra ordinary income recognised during the year. The Day Ahead Market (DAM) sales to the Southern African Power Pool (SAPP) market recorded an increase of P9.669 million in comparison to P1.010 million in the previous year. The increase was due to higher availability of excess energy for sale to the SAPP market during off peak hours.
- 2.2.4 The Government tariff support for each of the financial years 2021 and 2022 were P500 million and contributed only 9% of the Corporation's total Operating Income. The subsidy was reduced to P400 million in the financial year 2023.

2.3 Operating Costs

Total Operating Costs were recorded at P5.275 billion for the year ended 31 March 2022 compared to P4.342 billion in the prior year, resulting in P932.065 (21%) increase. This was primarily attributed to the following:

- 2.3.1 Purchased Energy (imports) at P1.987 billion was higher by P569.452 million (40%). The unsatisfactory performance of Morupule B Power Station (MBPS) was the key factor in driving the power imports up to meet the national demand shortfall of 1,798.230 GWh (45%). MBPS performed at an average availability rate of 36% (1,656.090 GWh of supply) than the anticipated 47%. However, during the months of February and March 2022, MBPS experienced an improvement in its performance recording an availability rate of 52% and 54% respectively due to the successful practical testing of Unit 4 which has been under remediation. Morupule A Power Station (MAPS) on the other hand performed at an availability rate of 55% (476.047 GWh of supply).
- 2.3.2 Generation Expenses were P930.055 million in comparison to P954.926 million in 2021. Orapa and Matshelagabedi emergency plants were run more in order to meet the energy shortfall.
- 2.3.3 Generation Operations and Maintenance costs of P138.043 million recorded an increase of P37.336 million (37%) compared to P100.707 million in 2021 as Orapa variable costs were high due to the running of the emergency plant.
- 2.3.4 Staff Costs were P736.341 million compared to P644.977 million in the previous year. The staff costs constituted 14% of the total operating

costs.

2.3.5 Administration Expenses were P850.548 million whilst in the prior year it recorded P693.006 million due to more activities post the Covid-19 movement restrictions.

2.4 Financial Items

The Financial Items recorded an overall loss of P83.285 million against a loss of P103.966 million in 2021 showing a saving of P20.681 million (20%). The major cause was the favourable swap movement. The Corporation has a derivative (swap) instrument to cover the volatility rates of the USD denominated loan for the construction of MBPS. This cross-currency swap instrument is still an asset (in the money) to BPC with a value of P637.929 million. The debtor impairment provision for the year amounted to P37.036 million whilst it was P36.239 million in the previous year.

2.5 Financial Position

2.5.1 The Corporation's Balance Sheet was reported at P24.702 billion as of 31 March 2022. It showed an increase of P16.106 million (0.1%) on the balance of P24.686 billion reported at the end of March 2021. The increase in Property, Plant and Equipment (PPE) was underpinned by higher asset valuation.

2.5.2 An Accumulated Loss of P6.101 billion was recorded in 2022 which represents an increase from P5.632 billion in 2021. The Shareholders' wealth represented by the total Equity (Capital and Reserves) was recorded at P12.235 billion against prior year's P12.259 billion.

2.6 Power Imports and Profitability Outlook

The Corporation's profitability is largely driven by internal generation, particularly MBPS Availability Rate. The internal generation's outlook is positive, with the 600 MW capacity MBPS currently at 530 MW. The remediated Unit 4 is on a 90-day trial period and running at 150MW.

Table I: Power Statistics: April-May 2021 vs April-May 2022

	2021/22	2022/23	Variance
Internal Power Generation			
Units (MWh)	303,910	577,733	90%
External Power Generation			
Units (MWh)	331,883	122,987	63%
Costs (BWP millions)	339.74	150.58	56%

In the first two months (April-May 2022) of the financial year 2023, the Corporation recorded a Net Profit of P76.347 million against the budgeted Net Loss of P53.666 million bolstered by savings of P88.043 million in power imports. The average MBPS availability rate was 66% in the same period.

3. PROJECTS UPDATE FOR THE YEAR ENDED 31st MARCH 2022

3.1 Internally Funded Capital Expenditure

The Corporation's total New Internally Funded Capital Expenditure (Capex) for the year ended 31 March 2022 amounted to P138.999 million inclusive of P37.057 million commitments. In addition, P233.781 million of Ongoing Capex items from the previous year were executed. Most of the Capex was attributed to the network infrastructure to improve service delivery and customer experience.

3.2 Externally Funded Capital Expenditure (Fully Funded by the Government of Botswana)

3.2.1 Northwest Transmission Grid Project: Eight out of the nine packages are completed and capitalised bringing the overall project progress as of 31 March 2022 to 95%. The remaining package from Legotlhwane to Ghanzi (220kV) is currently in progress and is expected to be completed by the end of July 2022. The project is estimated to cost P2.355 billion.

3.2.2 Rakola Project for the construction of Gaphatshwa Substation and six (6) kilometres line from Rakola Substation to Gaphatshwa Substation is completed. The SCADA component has been commissioned and the switch over to the new system was done on the 29th March 2022. However, the Distribution Management System (DMS) component is expected to be completed in July 2022. The estimated cost of the project is P706.438 million.

3.2.3 Transmission Backbone (Mochudi, Tlokweng, Ramotswa & Gaborone South)

This involves the upgrading of infrastructure to expand the capacity for electricity in these areas. The projects are expected to cumulatively cost

approximately P378.820 million. The Tlokweng project commenced in December 2020 and is scheduled for completion in August 2022 whilst the estimated project completion date for Mochudi project is September 2022. Both Ramotswa and Gaborone South projects have been completed.

- 3.2.3 **Rural Electrification Project:** The electrification of 115 villages has been completed and all villages have entered the defects notification period. The expenditure inclusive of material cost as of 31 March 2022 was P347.137 million.

4. **MEASURES TAKEN TO REDUCE COSTS AND ATTAIN OPERATIONAL EFFICIENCY**

The Corporation is undertaking the following various measures to reduce costs and improve operational efficiencies:

- 4.1 In the past, MBPS low availability was the single largest factor in the financial sustainability of the Corporation due to high dependence on power imports to meet the local demand. The ongoing remedial works programme at MBPS to rectify the construction and equipment defects are beginning to bear fruits.
- 4.2 The internal power generation assets are being mitigated, to the extent possible, by the optimal purchase of energy from the Southern African Power Pool (SAPP) market. In the 2022 financial year (2021/22), 252.838 GWh of cheaper energy was purchased from the SAPP market, which was dependent on energy availability. It constituted 6% of the total supply at a cost of P176.679 million.
- 4.3 Review of major contracts. The Corporation is currently reviewing the generation supply agreements to reduce the financial burden.
- 4.4 Optimisation of key business processes to improve efficiency and service delivery.
- 4.5 The development of a smart grid system to include SCADA (Supervisory Control and Data Acquisition system), GIS (Geographic Information System), Metering and Telecommunications systems.
- 4.6 Implement the Revenue Protection initiatives to reduce non-technical losses due to revenue leakages through illegal connections and other fraudulent activities.

- 4.7 Orapa Power Plant to run on cheaper gas fuel with effect from the financial year 2024/25.
- 4.8 Implement culture change initiatives to inculcate a high performance and customer centric culture across the organisation.

5. KEY INITIATIVES OF THE NEW BPC STRATEGY

The delivery of the new strategy objectives is underpinned by several initiatives which includes the following:

- 5.1 Attain financial sustainability through gradual migration to competitive electricity tariffs and further reduce reliance on Government financial support.
- 5.2 Improve operational efficiency by re-engineering the corporate-wide processes and implement the smart metering infrastructure.
- 5.3 Achieve excellent customer experience by leveraging on Information Communication and Technology (ICT) platforms that are under development to reduce turnaround times on service restoration and new connections.
- 5.4 Attract, develop, and retain talented staff to drive the customer centric and innovative culture in BPC.
- 5.5 Improve project and asset management functions in the Corporation.
- 5.6 Embrace Safety, Health and Environment (SHE) aspects to safeguard the employees, the community, and the environment against the risk of harm.
- 5.7 Secure sufficient internal power supply: The remedial works programme of MBPS is currently underway to improve the plant's reliability and availability. Upon its completion in 2025/26, the plant's availability rate is projected at minimum 80% thus significantly reducing the reliance on the expensive power imports. Furthermore, there would be no need for system peaking through the 160 MW Emergency Power Facilities.
- 5.8 The Corporation has also embarked on the development of 135 MW solar power plants through Independent Power Producers (IPPs) who would have Power Purchase Agreements (PPAs) with BPC as the offtaker. The projects

include 2x50MW PV solar plants and 12 grid-tied small PV solar plants. The addition of renewable energy with effect from 2022/23 financial year would not only increase the security of power supply but would also improve BPC's energy mix that currently relies heavily on coal-powered plants.

- 5.9 Optimise the customer service functions and improving customers' experience through the refurbishment of the network. In prior years, BPC was constrained to dedicate sufficient financial resources towards its capital expenditure plans due to its strained cash position. Consequently, the Corporation requires a healthy liquidity position to undertake significant refurbishment of its transmission and distribution infrastructure. The commitment of the Corporation is to maintain a robust preventative maintenance plan financed by cash from operations in order to improve service delivery.

6. REASONS FOR TARIFF INCREASE

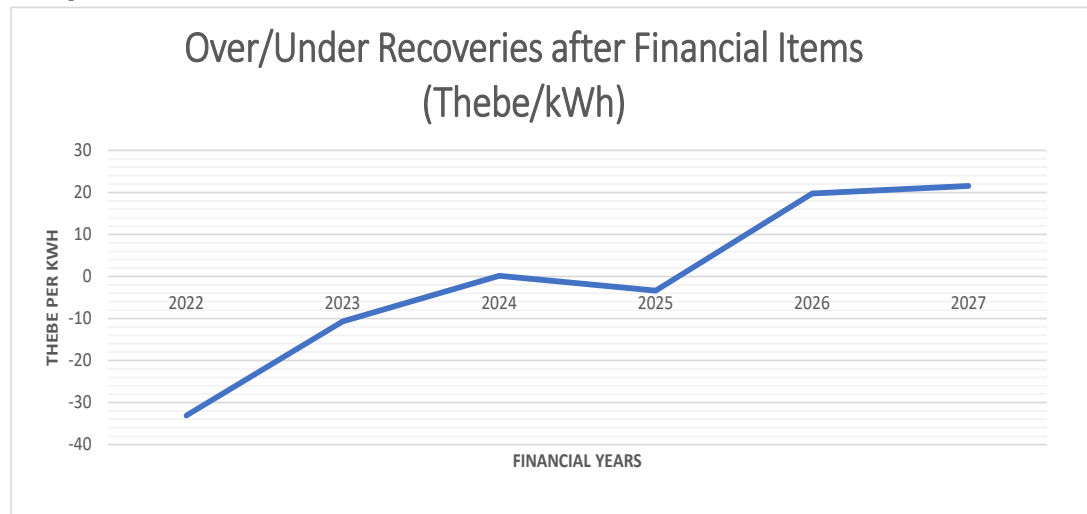
- 6.1 BPC's past recurring financial losses were mainly due to non-cost reflective tariffs, low availability of Morupule B Power Station and the increasing cost of imported power. Consequently, the Government of Botswana continues to subsidise the Corporation to cushion the impact of non-cost reflective electricity tariffs. However, this subsidy continues to reduce without being matched by corresponding electricity tariff increases.
- 6.2 Therefore, the tariff application for the 2024 financial year (2023/24) is based on the yearly determination of the required revenue to meet the operating, maintenance, and financing costs of the Corporation. The need for sufficient revenues is also supported by Section 17 of BPC Act [CAP 74:01], which requires it to conduct its affairs on sound commercial lines and to produce a net operating income by which a reasonable return can be measured. The Corporation is additionally required to remain with sufficient income after considering appropriate provisions for depreciation of assets, maintenance, and any applicable taxes. It should also be sufficient to meet obligations such as interest payment on borrowings, provision of a reasonable proportion of funds needed for expanding the Corporation's activities, improving its services, and providing reserves for asset replacements.
- 6.3 For the 2024 financial year (2023/24), the regulatory methodology translates into required revenue of P6.297 billion which is made up of return on Regulated Asset Base (RAB) and Total Expenses of P1.598 billion and P4.699 billion

respectively. The required rate of return (Weighted Average Cost of Capital) is 8% whilst Regulated Asset Base is P20.490 billion.

6.4 The regulatory allowed revenue of P6.297 billion constitutes a significant increase of 20% compared to the forecast Total Operating Income of P5.251 billion in the 2023 financial year. Considering this, the Corporation's tariff application is an increase of 5% which translates into Total Operating Income of **P5.370 billion** in the **2024 financial year** (inclusive of P300 million consumer tariff subsidy from the Government of Botswana). This is an increase of only 2% compared to Total Operating Income in the 2023 financial year. This would cover total costs related to generation, transmission, and distribution of electricity to consumers.

6.7 **Graph I indicates the 5-year Over/Under Recoveries**

Graph I



The Corporation is expected to largely attain break even position on its recovery of costs with effect from the financial year 2024. In the financial years 2026 and 2027, there would be over recovery of costs at 20 thebe/kWh and 22 thebe/kWh respectively. Consequently, the Corporation is expected to receive no financial support from the Government with effect from 2026. Additionally, the tariff increases are anticipated to be zero in 2026 and 2027.

7. CONCLUSION

Botswana Power Corporation undertook an assessment of the required revenue for the financial year 2024 in line with BERA prescribed methodology which translated into

P6.297 billion (20% tariff increase). However, the Corporation's tariff application is only an upward adjustment of **5%** to attain the Total Operating Income of **P5.370 billion** inclusive of **P300 million** consumer tariff subsidy from the Government of Botswana to cushion the consumers against steep and sudden tariff increase. Moreover, the proposed 5% electricity tariff increase is across all customer categories.

8. APPENDIX

Five-year financial plan

FIVE-YEAR FINANCIAL PLAN

	(Pula millions)						
	Audited 2020/21	Unaudited 2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Tariff Increases	22%	3%	0%	5%	5%	0%	0%
Electricity Sales	4,021.2	4,336.2	4,540.2	4,935.2	5,292.9	5,728.6	6,082.5
Other Income	326.7	71.7	311.1	134.6	131.5	187.2	225.6
SAPP Wheeling Revenue	7.7	7.5	7.1	7.8	9.4	11.3	13.5
Consumer Financed Project-Recovery	317.1	52.0	57.2	62.9	69.2	76	84
SAPP Electricity Sales	1.0	10.7	41.3	57.8	46.2	92.5	120.2
Other(Interest on schemes,late payment fees)	0.9	1.6	5.5	6.1	6.7	7	8
Government Funds for network maintenance	0.0	0.0	200.0	0.0	0.0	0	0
Consumer Tariff subsidy	500.0	500.0	400.0	300.0	200.0	0.0	0.0
Total Operating Income	4,847.8	4,907.9	5,251.3	5,369.8	5,624.4	5,915.8	6,308.1
Direct Input Costs	2,372.8	2,917.4	1,985.2	1,896.9	2,305.8	1,652.4	1,717.5
Power Purchases	1,417.9	1,987.3	1,145.2	966.5	1,422.5	383.8	414.2
Generation Costs - Morupule A	245.2	207.3	219.9	225.4	243.5	256.1	255.3
Generation Costs - Morupule B	504.0	437.0	577.6	660.4	592.8	962.7	994.7
Other Generation costs (Orapa, Matshelagabedi Plants)	205.8	285.8	42.5	44.6	47.0	49.9	53.2
Gross Profit/(loss)	2,475.0	1,990.5	3,266.1	3,472.9	3,318.6	4,263.4	4,590.6
Administrative Expenses(excluding depreciation)	1,438.7	1,724.9	2,033.7	2,075.6	2,182.9	2,268.8	2,421.2
Staff costs&other indirect staff costs	645.0	736.3	861.6	904.6	954.4	1,012.1	1,079.5
Generation Operations & Maintenance fees	100.7	138.0	106.5	23.0	0.0	0.0	0.0
Other Administrative Overheads	693.0	850.5	1,065.7	1,147.9	1,175.5	1,256.7	1,341.7
Other maintenance	404.4	502.6	650.9	726.0	754.4	836.8	921.8
Transport	28.1	35.5	28.3	28.3	27.0	25.7	24.3
Travel	8.5	17.3	23.8	23.8	22.7	21.6	20.4
Other administrative expenses	95.6	102.8	132.0	132.0	126.0	119.8	113.4
Insurance & Risk	71.3	76.6	90.0	94.5	99.7	105.8	112.8
Consultancy & SAP consultancy	3.8	14.5	45.9	45.9	41.3	37.1	33.4
Commission to prepaid vendors	81.3	101.5	94.8	97.5	104.4	109.9	115.5
Depreciation	530.9	632.2	709.9	726.6	771.2	793.0	818.1
Operating profit/(loss)	505.4	(366.6)	522.5	670.6	364.4	1,201.6	1,351.3
Financial items	(104.0)	(83.3)	(141.4)	(126.7)	(107.9)	(105.2)	(82.0)
Impairments/Provisions	(36.2)	(37.0)	(50.0)	(50.0)	(50.0)	(50.0)	(50.0)
Total financial items/Provisions	(140.2)	(120.3)	(191.4)	(176.7)	(157.9)	(155.2)	(132.0)
Net Profit/(loss) before tax	365	(487)	331	494	206	1,046	1,219
Income tax (charge)/credit	(749)						
Loss for the Year	(384)	(487)	331	494	206	1,046	1,219
Deferred tax on revaluation of Property Plant and Equipment	-240	0	0	0	0	0	0
Gains on revaluation of Property Plant and Equipment	1,638	0	0	0	0	0	0
Total Comprehensive Income /(Loss) for the year	1,014	(487)	331	494	206	1,046	1,219
Regulated Rate Base/Asset Base and Working Capital	22,034.54	21,796.48	21,185.48	20,489.76	19,660.12	18,991.68	18,374.97
Rate of Return/Weighted Average Cost of Capital	7%	8%	8%	8%	8%	8%	8%
Return On Assets	1,607.26	1,699.29	1,651.66	1,597.42	1,532.74	1,480.62	1,432.54
Taxes	749	0	0	0	0	0	0
Total Expenses	4,342.4	5,274.5	4,728.8	4,699.2	5,260.0	4,714.2	4,956.7
Revenue Requirement (without taxes)	5,949.71	6,973.81	6,380.46	6,296.62	6,792.75	6,194.82	6,389.28
Revenue Requirement (with taxes)	6,698.71	6,973.81	6,380.46	6,296.62	6,792.75	6,194.82	6,389.28

