BOTSWANA POWER CORPORATION ELECTRICITY TARIFF ADJUSTMENT PROPOSAL FOR THE 2022/23 FINANCIAL YEAR

1. 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 Mineral Resources, Green Technology and Energy Security. It is regulated by the Botswana Energy Regulating Authority (BERA).

1.2 The Corporation has formulated its new five-year strategic plan which commences in the current financial year 2021/22 and ends in the financial year 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 2021

2.1 Profitability

The unaudited financial results for the year ended 31st March 2021 show a Total Profit of P357.162 million against a budgeted profit of P106.622 million. These results reflect a positive variance of P250.540 million (235%), due to an increase in the Operating Income of P99.479 million (2%), savings of P98.059 million (5%) in Administration expenses and favourable Financial Items of P150.178 million (52%), despite a negative variance in Direct Input Costs of P97.176 million (4%).

2.2 Operating Income

2.2.1 The Corporation recorded an Operating Income (excluding Government subsidy) of P4.344 billion against a budgeted P4.244 billion. This resulted in a positive variance of P99.479 million (2%), mainly attributed to the increase in Other Income due to the P222.864 million recognized upon finalization of the Morupule A Power Station (MAPS) refurbishment project. This was a once off extra ordinary income that is not expected to be earned again. However, electricity sales recorded a decline of P88.845 million (2%) due to the adverse effects of the COVID-19 pandemic.

2.2.2 Mining Sector Income contributed P633.814 million against the budgeted P669.324 million. The P35.510 million (5%) reduction in energy consumption was due to the impact of the COVID-19 pandemic at the beginning of the financial year.

2.2.3 The Non-Mining Sector income of P3.387 billion was below the budget of P3.441 billion. A negative variance of P53.335 million (2%) was recorded mainly due to below budget sales of P119,897 million by Commercial customers. However, consumption by the Domestic and Government customers exceeded the budget by P64.518 million and P2.044 million respectively.

2.3 **Operating Costs**

Total Operating Costs were recorded at P4.347 billion against a budget of P4.348 billion, resulting in a marginal saving of P0.883 million (0.02%). This was attributed to the following:

2.3.1 Purchased Energy (imports) were lower than the budget by P59.312 million (4%) compared to the budget of P1.477 billion. Morupule B Power Station (MBPS) performed poorly at an availability rate of 29% (1,426 GWh of supply) than the anticipated 31%, due to delays to the commissioning of Unit 4 which is still undergoing remedial works.

2.3.2 Generation Expenses of P893.153 million recorded a negative variance of P156.488 million (21%) compared to the budget of P736.666 million. Orapa and Matshelagabedi emergency plants were run more than initially planned in order to meet the energy shortfall from MBPS.

2.3.3 Generation Operations and Maintenance costs of P100.707 million recorded an over expenditure of P11.504 million (13%) compared to the budgeted P89.202 million. Orapa and Matshelagabedi were run more than planned.

2.3.4 Staff Costs of P644.978 million were P47.057 million (7%) below the budget of P692.035 million. The variance was mainly due to the vacancies and unutilised bonus provision.

2.3.5 Administration Expenses were P729.246 million compared to the budget of P752.890 million resulting in a net saving of P23.644 million (3%).

2.4 **Financial Items**

The Financial Items recorded an overall loss of P103.154 million against a planned loss of P269.899 million showing a positive variance of P150.179 million (56%). The major cause was the favourable foreign exchange and interest rate swap. The Corporation has a swap instrument to cover the ICBC loan volatility rates. This cross-currency swap instrument is still an asset (in the money) to BPC with a value of P438.839 million.

The debtor impairment provision for the year amounted to P36.566 million.

2.5 **Financial Position**

2.5.1 The Corporation's Balance Sheet was reported at P23.017 billion as at 31 March 2021. It was below the budget of P23.280 billion, a variance of P263.063 million (1%). The decrease on Property, Plant and Equipment (PPE) was mainly due to the P311.420 million loss on the fair value of the cross-currency swap asset despite an increase of P312.570 million on Property Plant and Equipment due to Northwest Transmission Grid Connection and village electrification projects. The revaluation of fixed assets as at 31 March 2021 was not yet completed at the period of reporting with the possibility of increasing the Corporation's Balance Sheet.

2.5.2 The Accumulated Loss of P4.890 billion was recorded whilst P5.247 billion was recorded in the same period in the past year. This increase was due to the Net Profit of P357.162 million realized during the year. The budgeted Accumulated Loss was P4.894 billion.

2.5.3 The shareholders' wealth represented by the total Equity (Capital and Reserves) was recorded at P11.301 billion against a budget of P11.760 billion due to the revaluation gains that were budgeted as at 31 March 2021 but not yet recognized.

3. PROJECTS UPDATE FOR THE YEAR ENDED 31st MARCH 2021

3.1 **Internally Funded Capital Expenditure**

The Corporation's total capital expenditure (capex) for the year ended 31 March 2021 amounted to P203.497 million inclusive of commitments of P153.623 million. This constituted 29% of the 2020/21 approved capex budget of P695.881 million. The 2020/21 capex implementation was adversely impacted by the COVID-19 pandemic which resulted in minimal business operations especially in the first quarter of the year. Furthermore, the execution of Ongoing projects was delayed by the movement restrictions imposed by the Government to mitigate against the spread of the virus. The Corporation also started the year 2020/21 with a huge negative liquidity position owing to unprecedented power imports of P2.208 billion in the financial year 2019/20.

3.2 Externally Funded Capital Expenditure

3.2.1 **Morupule A:** The refurbishments of Morupule A were aimed at rehabilitating the Power Station to return it to service. All four (4) units have been taken over by BPC for commercial operation and have entered into the warranty period. The project has been capitalized in the 2021 financial year and it is deemed to be closed.

3.2.2 **Northwest Transmission Grid Project:** Eight out of the nine packages are completed and capitalised bringing the overall project progress as at 31 March 2021 at 96%. The remaining Legotlhwane to Ghanzi (220kV) project has a planned completion date of the final quarter of the financial year 2021/22. As at 31 March 2021, the total funds received were P2.352 billion against the approved estimated costs of P2.355 billion. P2.162 billion was spent as at 31 March 2021.

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

This involves the upgrading of Mochudi, Tlokweng, Ramotswa and Gaborone South infrastructure to expand the capacity for electricity in these areas. The projects are expected to cost approximately P339.400 million in total and are fully funded by Government. The total expenditure for the project as at 31 March 2021 was P176.933 million. Tlokweng project commenced in December 2020 and is scheduled for completion in May 2022 whilst the estimated project completion date for Mochudi project is March 2022. Both Ramotswa and Gaborone South projects have been completed.

3.2.3 **Rural Electrification Project:** The electrification of 115 villages is expected to be completed by the third quarter of the financial year 2021/22. The expenditure inclusive of material cost as at 31 March 2021 was P308.537 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 Morupule B Power Station (MBPS) low availability remains the single largest factor in the financial sustainability of the Corporation due to high dependence on power imports to meet the local demand. The Corporation is currently undertaking remedial works programme at MBPS to rectify the construction and equipment defects.

4.2 MBPS's poor performance is being mitigated, to the extent possible, by the optimal purchase of cheaper energy from the Southern African Power Pool (SAPP) market.

4.3 Review of existing major contracts that involve the Corporation.

4.4 Optimisation of key business processes in order to improve efficiency and service delivery.

4.5 Commenced 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 Implemented the Revenue Protection initiatives to reduce non-technical losses due to revenue leakages through illegal connections and other fraudulent activities.

4.7 The process to convert Orapa Power Plant from diesel to use cheaper gas fuel commenced in the financial year 2020/21 and it is anticipated to be completed in the financial year 2023/24.

4.8 Implementation of culture change initiatives to inculcate a high performance and customer centric culture across the organisation was started in the financial year 2020/21.

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 support.

5.2 Improve operational efficiency by re-engineering the corporate-wide processes and implementing 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. In addition, the development and implementation of customer service standards are planned to be done in the current financial year.

5.4 Attract, develop and retain talented staff to drive the customer centric and innovative culture in BPC.

5.5 Embrace Safety, Health and Environment (SHE) aspects to safeguard the employees, the community and the environment against the risk of harm.

5.6 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 2024/25, the plant's availability rate is projected at 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.

5.7 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.

Table 2: 2 x 50 MW Solar Power Plant Project Timelines

Table 2

Milestone	**Estimated Completion Date**
Release of Request For Proposal (RFP)	4th February 2020
Bidder's Conference	18th August 2020
Deadline to submit Proposals	18th December 2020
Notification of Shortlisted Bidder(s)	01st March 2021
Selection of Successful Bidder	30th April 2021
Anticipated Commercial Operation Dates	12th October 2022

5.8 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 long overdue refurbishment of its transmission and distribution infrastructure. The commitment of the Corporation is to undertake a robust preventative maintenance plan to improve service delivery and it would be financed by cash from operations.

6. REASONS FOR TARIFF INCREASE

6.1 BPC's recurring precarious financial position was 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 in order to cushion the impact of non-cost reflective electricity tariffs. However, this subsidy has significantly reduced over the last 5 years without being matched by corresponding electricity tariff increases.

6.2 Therefore, the tariff proposal for the financial year 2022/23 is based on the yearly determination of the required revenue to meet the operating, maintenance and financing costs of the Corporation. The proposal also considered future energy demands especially from Large Power Users such as mines. 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.

6.3 The projected tariff increase of 5% in the 2022/23 financial year provides the required revenue of P6.155 billion. The P6.155 billion is made up of return on Regulated Asset Base and Total Expenses of P1.437 billion and P4.718 billion respectively. The consumer tariff subsidy from the Government of Botswana would be P500 million.

6.4 The required 2023/24 projected sales revenue is P4.592 billion which translates into revenue growth rate of 11% compared to the 2021/22 financial year. The 11% revenue growth rate is made up of 5% and 6% for tariff increase and average energy consumption growth respectively.

6.5 Table 3 showing the existing and proposed Sales Information

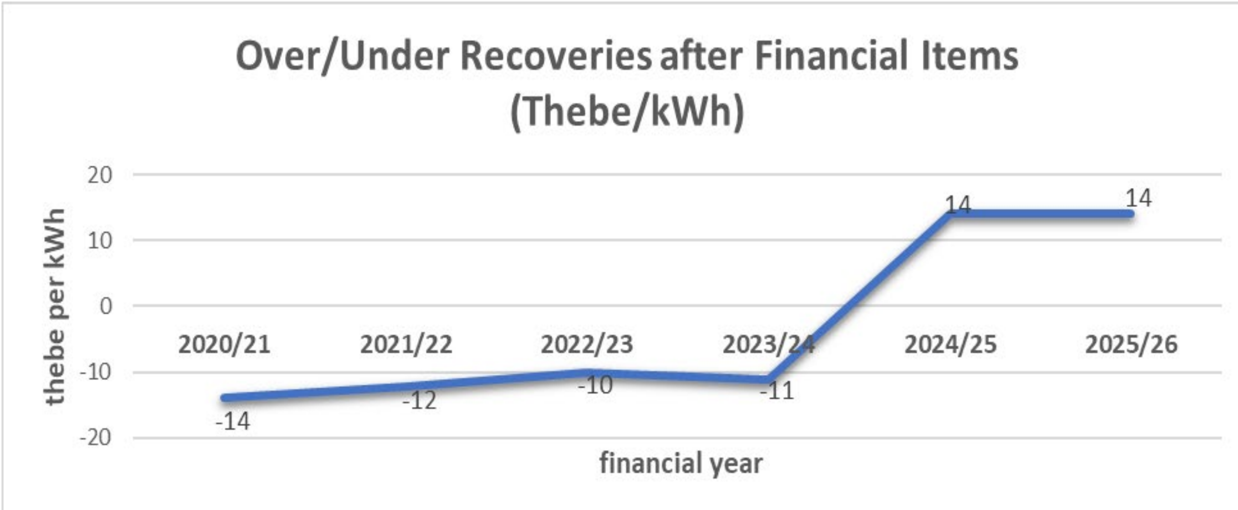
Table 3

	2021/22 with tariff increase of 3%					2022/23 with 5% tariff increase				
CATEGORY	Projected kWh consumption 2021/22 with 2% average growth	TARIFF INCREASE	Projected PULA SALES 2021/22	Tariff 2021/22 in Pula	Revenue growth rate	Projected kWh consumption 2022/23 with 6% average Growth	TARIFF INCREASE	Projected PULA SALES 2022/23	Tariff 2022/23 in Pula	Revenue growth rate
Domestic	1,270,496,273.27	3%	1,339,023,429.54	1.05	6%	1,308,611,161.47	5.0%	1,448,153,839.04	1.11	8%
Government	323,447,774.22	3%	697,396,478.30	2.16	4%	329,882,897.36	5.0%	746,854,181.80	2.26	7%
Commercial	1,064,216,470.17	3%	1,503,712,831.85	1.41	7%	1,117,427,293.68	5.0%	1,657,843,397.11	1.48	10%
Mining	574,119,279.43	3%	607,879,808.94	1.06	3%	663,626,503.49	5.0%	739,412,375.20	1.11	22%
TOTAL	**3,232,279,797.09**	3%	**4,148,012,548.62**	**1.28**	**6%**	**3,419,547,856.00**	**5.0%**	**4,592,263,793.16**	**1.34**	**11%**

6.6 The total cost of rendering the service constitutes all costs related to generation, transmission and distribution of electricity to the consumers. In the current year 2021/22, the average unit cost is planned at 141 thebe/kWh whilst the proposed average unit cost is 144 thebe/kWh. The increase is mainly due to significant increase in maintenance costs.

6.7 **Graph 1 indicates the 5-year Over/ Under Recoveries of Costs**

Graph 1



The Corporation is expected to continue recording under recovery of costs for every unit of electricity sold until the financial year 2023/24. Because of this revenue shortfall, there is need for the Corporation to continue receiving P500 million yearly tariff support from the Government of Botswana in the same period. This financial support is meant to cushion the customers from sudden increases in electricity tariffs. The over recovery of costs is recorded in the last 2 years of the strategy with zero financial support from the Government of Botswana.

7. CONCLUSION

Botswana Power Corporation undertook an assessment of the required revenue for the financial year 2022/23 in line with BERA prescribed methodology. The required revenue for BPC to meet its operating, maintenance and financing costs is P6.155 billion coupled with P500 million consumer tariff subsidy from the Government of Botswana. Furthermore, the required revenue is attainable by 5% electricity tariff increase across all customer categories.

8. APPENDIX

Five-year financial plan

	(Pula millions)					
	Unaudited 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Tariff Increases	22%	3%	5%	3%	0%	0%
Electricity Sales	4,021.2	4,148.0	4,592.3	5,035.0	5,536.0	5,591.4
Other income	**322.4**	**142.1**	**143.0**	**157.4**	**206.8**	**236.4**
SAPP Wheeling Revenue	7.7	9.7	10.7	11.8	13.0	14.3
Consumer Financed Project-Recovery	312.6	99.0	89.1	89.1	93.6	103
SAPP Electricity Sales	1.3	21.6	30.2	42.3	84.5	101.5
Other(Interest on schemes,late payment fees)	0.9	11.8	12.9	14.2	15.7	17
Consumer Tariff subsidy	500.0	500.0	500.0	500.0	0.0	0.0
Total Operating Income	**4,843.6**	**4,790.1**	**5,235.3**	**5,692.5**	**5,742.8**	**5,827.7**
Direct Input Costs	**2,386.9**	**2,051.5**	**2,109.4**	**2,717.6**	**1,902.7**	**1,983.6**
Power Purchases	1,417.9	976.3	998.2	1,340.3	382.9	398.5
Generation Fuel Costs - Morupule A	204.8	354.5	367.0	380.7	395.8	412.4
Generation Fuel Costs - Morupule B	482.6	555.0	626.0	595.6	810.7	844.7
Other Generation costs (Orapa, Matshelagabedi Plants)	205.8	130.6	81.8	363.3	274.0	286.8
Other Cost of Sales	75.8	35.1	36.3	37.7	39.3	41.2
Gross Profit/(loss)	**2,456.7**	**2,738.6**	**3,125.8**	**2,974.9**	**3,840.0**	**3,844.1**
Administrative Expenses(excluding depreciation)	**1,399.1**	**1,668.5**	**1,964.4**	**1,795.2**	**2,046.1**	**1,966.2**
Staff costs&other indirect staff costs	645.0	787.0	814.7	846.3	882.3	923.7
Generation Operations & Maintenance fees	100.7	81.3	60.4	69.4	73.6	78.0
Other Administrative Overheads	**653.4**	**800.2**	**1,036.3**	**826.5**	**1,037.2**	**911.6**
Other maintenance	404.4	432.0	697.0	497.0	718.1	602.0
Transport	28.1	32.0	29.9	27.5	25.2	23.2
Travel	8.5	14.3	13.3	12.3	11.3	10.3
Other administrative expenses	56.0	110.1	103.0	94.6	85.4	76.6
Insurance & Risk	71.3	79.0	81.8	85.0	88.3	91.7
Consultancy & SAP consultancy	3.8	48.2	24.1	22.1	19.9	17.9
Commission to prepaid vendors	81.3	84.7	87.2	88.1	88.9	89.8
Depreciation (inclusive of armotisation of deferred income)	560.7	623.3	643.6	697.6	724.4	746.1
Operating profit/(loss)	**496.9**	**446.8**	**517.8**	**482.1**	**1,069.6**	**1,131.8**
Financial items	(103.2)	(180.4)	(198.4)	(218.2)	(240.1)	(264.1)
Impairments/Provisions	(36.6)	(20.0)	(20.0)	(20.0)	(50.0)	(50.0)
Net Profit/(loss)	**357**	**246**	**299**	**244**	**779**	**1,132**
Income tax (charge)/credit	0	0	0	0	0	0
Profit/(Loss) for the Year	**357**	**246**	**299**	**244**	**779**	**1,132**
Deferred tax on revaluation of Property Plant and Equipment	0	0	0	0	0	0
Total Comprehensive Profit/(Loss) for the year	**357**	**246**	**299**	**244**	**779**	**1,132**
Regulated Rate Base/Asset Base and Working Capital	22,034.54	19,818.64	19,706.80	19,320.48	18,880.31	18,527.28
Rate of Return/Weighted Average Cost of Capital	7%	7%	7%	7%	7%	7%
Return On Assets	**1,607.26**	**1,445.63**	**1,437.47**	**1,409.29**	**1,377.18**	**1,351.43**
Taxes	0	0	0	0	0	0
Total Expenses	**4,346.7**	**4,343.3**	**4,717.4**	**5,210.4**	**4,673.2**	**4,696.0**
Revenue Requirement (without taxes)	**5,953.95**	**5,788.97**	**6,154.92**	**6,619.67**	**6,050.40**	**6,047.39**
Revenue Requirement (with taxes)	**5,953.95**	**5,788.97**	**6,154.92**	**6,619.67**	**6,050.40**	**6,047.39**