

# Initial Decision Issued by the Public Utilities Commission (the "Commission") May 5, 2023

## Re: 2023 ANNUAL TARIFF REVIEW PROCEEDING ("2023-ARP") FOR BELIZE ELECTRICITY LIMITED ("BEL")

#### 1. Introduction

In its 2020 FTRP Final Decision the Public Utilities Commission ("PUC" or the "Commission") approved a Mean Electricity Rate (the "MER") of BZ\$0.4151/kWh for the period July 1, 2020, to December 31, 2020, and BZ\$0.4018/kWh for the period January 1, 2021, to June 30, 2024.

Subsequently, in its 2021 ARP Final Decision and then in its 2022 ARP Final Decision, the Commission approved a MER of BZ\$0.3999/kWh for the period July 1, 2021, to June 30, 2024 and made related adjustments to the Schedule of Electricity Tariffs.

The current 2023 ARP seeks to amend these Decisions to reflect actual business results for the year just concluded (ATP 2021|2022) and update projections for ATPs 2023|2024.

In its 2023 ARP Submission, which was received by the PUC on April 2, 2023, BEL proposes to maintain average electricity prices to customers at \$0.40 per kWh by way of "modest amendments to the approved rate schedule in the PUC's Final Decision for the 2022 Annual Review Proceeding ("ARP 2022"), and the introduction of incentive pricing for tourism, distributed generation, electric vehicle, and wholesale energy customers."

In BEL's estimation, the new MER is to be \$0.4252; however, in order to maintain prices at \$0.40 per kWh, BEL recommends that \$52,000,000 in excess input cost be added to customer's account starting in the upcoming 2024 Full Tariff Review Proceedings ("2024 FTRP"), which is expected to be carried over from the current FTP 2020|24.

BEL concedes, though, that "While the proposal ensures that BEL can finance its development plans, the rates do not allow for the zeroing out of the Regulatory Account Balance (RAB) by the end of the current Full Tariff Period...Instead, BEL maintains that this variance between actual costs and collections accumulate in the RAB in the medium-term and is confident that the higher sales borne out by its expansion plans will allow for the full recovery over the next decade with resultant benefits to both the Company and stakeholders in the industry."

In short, then, BEL's position is that electricity tariffs should not be revised and should remain consistent with the approved tariffs as set out in Schedule 6 of the Commissioner's Belize Electricity 2022 ARP Final Decision. To accomplish this, there should be some shifting of Residential and Commercial Tariffs, the introduction of new customer classifications and \$52,000,000 in excess input costs should be carried forward into the FRTP.

#### 2. Summary of BEL's 2023-ARP Submission

- 2.1. BEL proposes to amend the existing approved Tariff Schedule by removing and adding new categories as highlighted below:
  - Adding a higher value block for Residential and Commercial I classifications and eliminating the Industrial I classification per comparative below:

	Schedule 6 EXISTING			Schedule 6			Sch
	Belize Electricity Limited (BEL)		1	Belize Electricity Limited (BEL)		В	Belize Electric
<b>Existing Tariffs</b>	for Annual Tariff Period July 1, 2023 to J	June 30, 2024	Proposed Tari	ffs for Annual Tariff Period July 1	, 2023 to June 30, 2024		
Customer Class	Service Type/Consumption Block	2023 2024 Jul-Jun		Service Type/Consumption Block	2023 2024 Jul-Jun	Customer Class	Service Typ
	Minimum Charge - Social Soc First 60 kWhs	5.00 0.22	Social	Minimum Charge - Social Soc First 60 kWhs	5.00 0.22	Social	
esident	Minimum Charge - Residential ResLV - First 50 kWh ResLV - 51 - 200 kWh ResLV- Above 200 kWh	10.00 0.33 0.38 0.43	Residential	Minimum Charge - Residential ResLV - First 50 kWh ResLV - 51 - 200 kWh ResLV- 201-300 Kwh ResLV- Above 300 kWh	10.00 0.33 0.38 0.43	Residential	
Com I	Coml - LV - Service Charge Coml -LV - First 50 kWh Coml -LV - 51 - 200 kWh Coml -LV- Above 200 kWh	10.00 0.33 0.38 0.43	Com I	Coml - LV - Service Charge Coml -LV - First 50 kWh Coml -LV - 51 - 200 kWh Coml -LV - 201-300 kWh	10.00 0.33 0.38 0.43	Com I	
Com	Com HV - Service Charge Com HV - First 10,000 kWh Com HV - Above 10,000 - 20,000 kWh Com HV - Above 20000 kWh	150.00 0.41 0.39 0.38	ComII	Com HV - Service Charge Com HV - First 10,000 kWh Com HV - Above 10,000 kWh	150.00 0.41 0.39	ComII	
I pul	Service Charge Energy Demand (per KVA)	250.00 0.30 35.82	Ind	Service Charge Energy Demand (per KVA)	250.00 0.26 23.00	Ind I	
I pu	Service Charge Energy Demand (per KVA)	250.00 0.26 23.00	St Lights	Energy	0.45	II pul	
St Lights	Energy	0.45				St Lights	

2.1.2 New tariff for Distributed Generation customers, Electric Vehicle charging, a Wholesale for Spanish Lookout and a Tourism rate as follows:

Table 5: Proposed Grid-Tied DG Rates

Category	Rate
Demand Charge (per KVA per month)	30.00
Peak Energy Charge (per kWh)	0.3500
Off-Peak Energy Charge (per kWh)	0.3000
Feed-in Tariff	0.1300

Table 6: Proposed EV Rates

Category	Rate
Demand Charge (per KVA per month)	30.00
Peak Energy Charge (per kWh)	0.3500
Off-Peak Energy Charge (per kWh)	0.3000

Table 7: Proposed SPLC Tariff

Category	First 10 Years	After 10 Years
Demand Charge (per KVA per month)	25.00	8.33
Peak Energy Charge (per kWh)	0.3000	0.3000
Off-Peak Energy Charge (per kWh)	0.2600	0.2600

**Table 8: Proposed Tourism Tariff** 

Category	Rate
Demand Charge (per KVA per month)	30.00
Peak Energy Charge (per kWh)	0.3500
Off-Peak Energy Charge (per kWh)	0.3000

2.2 BEL has once again not provided actuals for its Assets Register in the year under review. Instead, the Commission was supplied with a projection of investments for the period between 2022 and 2027. The Company proposes to spend \$527,219,648 (excluding 2022) on Capital Expenditure for the period 2023 to 2027.

	2022	2023	2024	2025	2026	2027	Total
Total Summary							
Transmission Total	10,173,188	10,725,997	4,305,400	633,400	21,400,400	633,400	47,871,785
Generation	12,379,519	14,055,500	16,000,000	9,900,000	-	-	52,335,019
Substation Total	7,775,017	19,689,328	57,732,700	55,453,500	34,190,000	57,800,000	232,640,545
Distribution Total	30,747,830	30,727,740	33,610,226	27,826,366	23,595,479	25,053,843	171,561,484
General Properties Total	6,749,570	10,608,082	9,286,878	8,246,108	4,837,982	5,682,265	45,410,885
Transportation	1,704,205	3,220,000	-	2,000,000	2,500,000	2,000,000	11,424,205
SUBTOTAL	69,529,330	89,026,647	120,935,204	104,059,374	86,523,861	91,169,508	561,243,924
Interest Charged to Construction	3,838,888	5,905,230	3,457,787	2,943,908	3,073,865	2,677,240	21,896,919
Administrative Cost	3,791,275	3,260,133	3,440,613	3,432,561	3,636,815	3,676,901	21,238,298
TOTAL	77,159,493	98,192,010	127,833,604	110,435,843	93,234,542	97,523,649	604,379,141

2.3 Replacing its Customer Contribution Policy with a Service Connection Policy

In BEL submission, the Company advises that it is "now rolling out a new Service Connection policy designed to remove completely or otherwise substantially lower the financial cost and bureaucracy to Customers of installing new electricity service connections or upgrading existing connections imposed by the existing policy. Instead of seeking to get a single Customer to pay huge costs upfront to cover the risk of not realizing revenues from a new line extension and/or system upgrade, the Company will instead promote these line extensions and upgrades to new Customers to connect to BEL. Where significant costs are involved, the Company will rely on redeemable security to cover risk exposure. This will spur market growth, prevent grid defection, and build the BEL brand as a Company that delivers energy solutions and supports national development."

#### 2.4 Corrections for the ATP 2021|2022 being closed this ARP is \$23.5MN in favour of BEL

#### Schedule 1

#### Belize Electricity Limited (BEL) Annual Corrections - July 1, 2021 - June 30, 2022

General Corrections - July 1, 2021 - June 30, 2022

Approved Tariff Basket Revenue - \$: 258,919,001

Realized Tariff Basket Revenue - \$: 235,332,346

Variance (Total Approved less Total Realize) -\$: 23,586,655

#### 2.5 MER calculated for the FTP to be \$0.4252 BZD/kWh

#### Schedule 4

#### Belize Electricity Limited (BEL)

Proposed Tariff Basket Revenue (TBR) and Components and Mean Electricity Rate (MER) for Annual Tariff Period July 1, 2022 to June 30, 2024

	2020 2021	2021   2022	2022   2023	2023   2024	Total FTRP
Revenue Components of TBR:					
Value Added of Delivery (VAD)					
OPEX	32,524,967	33,012,258	33,506,842	34,008,830	133,052,897
Return	38,765,031	39,232,153	32,532,827	35,777,971	146,307,981
Depreciation	17,492,706	18,220,765	18,402,270	25,718,465	79,834,206
Net Annual Corrections - FTRP	8,842,163	8,842,163	8,842,163	8,842,163	35,368,652
IE Fees Reimbursement - FTRP 20	-	-	-	-	-
ARP 21	-	(338,486)	-	-	(338,486
ARP 22			-		-
ARP 23				23,586,655	23,586,655
Taxes/License Fees	4,913,482	5,825,678	5,646,729	6,527,936	22,913,825
Sub total (VAD)	102,538,349	104,794,530	94,078,790	129,609,979	431,021,649
Reference Cost of Power	120,093,293	158,424,419	161,070,371	164,812,046	604,400,130
Less Other Income	4,254,659	4,299,949	4,183,426	4,291,542	17,029,577
Tariff Basket Revenue	218,376,983	258,919,001	250,965,736	290,130,483	1,018,392,202
Demand (kWH)	534,376,841	585,706,369	614,614,608	660,521,472	2,395,219,291
ARP					
MER	0.4087	0.4421	0.4083	0.4392	0.4252
COP	0.2247	0.2705	0.2621	0.2495	0.252
VAD (excl. corrections)	0.1674	0.1571	0.1319	0.1763	0.1582
Corrections	0.0165	0.0145	0.0144	0.0134	0.014

#### **3** The Decision Process

In these filings, BEL is effectively asking the PUC to conduct two rate proceedings, specifically,

(i) to fix Regulated Values to recover prudent investments and input costs properly incurred in respect of its licensed businesses, which is the scope of Annual Rate Proceedings; and

(ii) to approve new customer classifications and associated tariff schedules for Distributed Generation customers, Electric Vehicle charging, Spanish Lookout and Tourism.

Separate and apart from the above rate proceedings, BEL appears to ask the Commission to adopt/approve the following:

- (a) the Least Cost Expansion Plan (LCEP) filed on March 22, 2023 (and then again on April 28, 2023); and
- (b) its new Connection Policy

The Commission also finds itself faced, once again, with BEL's request to retain existing tariffs, despite a discernible increase in cost of power ("COP"), which was primarily due to the historic rise in energy prices in the ATP 2021|22.

The Commission came to its Initial Decision by contemplating the following questions:

Question 1 Should the Commission consider the tariffs for Distributed Generation, Electric Vehicle charging, Spanish Lookout and Tourism, as well as the adoption of the LCEP and the New Connection Policy in these 2023 Annual Review Proceedings?

#### Regardless of the answer to Question 1, then

Question 2 Can the Commission legally authorize BEL to postpone the recovery of costs beyond this Full Tariff Period ("FTP")?

#### If the answer to Question 2 is 'yes', then

**Question 3** Has BEL demonstrated that the \$52 Million dollars are prudently incurred costs that ought to be passed onto the consumer?

In answering <u>Question 1</u>, the Commission holds the view that the timeline to finalize the 2023 ARP does not allow for a thorough review of the proposed tariffs for Distributed Generation, Electric Vehicle charging, Spanish Lookout and the Tourism Sector. Given its time constraints, the Commission undertakes to review the submissions made by BEL on these additional matters within the next three (3) months, during which time it will conduct public consultations on the various matters and issue its Decision.

Additionally, the Commission repeats its position as stated in its letter of March 22, 2023 to CEO John Mencias in which it was clearly emphasized that BEL should not construe the act of filing an LCEP as receiving approval to undertake any investment in projects specified in the said filing, including those labelled as BEL-owned investments.

In answering <u>Question 2</u>, the PUC will not reiterate its stance on this matter except to recognize that BEL also holds a similar view. BEL in fact wrote that, "Understandably, to achieve this, rates would need to increase but BEL does not vary from its position that price increases would do more harm than good to economic development."

This view is held on the basis of Section 15(2) of the Electricity (Tariffs, Fees, and Charges) Byelaws (the "Byelaws"), which requires that any recovery of cost would have to be over the remaining period of this Full Tariff Period ("FTP").

Coupled with Section 15(2), however, the Commission takes note of Section 22(1)(b) of the Public Utilities Commission Act (the "Act") that empowers it to determine and prescribe the rates which may be charged for utility services. Further, Section 22(2)(c)(i) mandates that the Commission, in exercising its functions, shall protect the interest of consumers in respect of the tariffs charged.

The Commission is keenly aware that an adjustment in tariff to recover BEL's excess cost would significantly and disproportionately burden consumers over the coming year as it would require a major adjustment in tariffs in ATP 2023|2024. In using BEL's calculations, and applying the Byelaws strictly, electricity rates would have to be increased by \$0.0787 per kWh or as much as 20% of electricity bills for July 1, 2023 to June 30, 2024.

The Commission is also mindful of Section 22(2)(b) of the Act that requires it to ensure that licence holders are able to finance the carrying on of the activities which they are authorized by their licences to do. BEL clearly suggests that it has prudently incurred these costs, it is prepared to recover these excesses beyond the current FTP. In this case, it is BEL that has indicated its willingness to "allow for the full recovery over the next decade", and clearly beyond the close of this FTP.

While Section 15(2) of the Byelaws places a restriction on the Commission to zero out all Corrections by the end of the current FTP, it does not consider the situation where the licensee has indicated that it is prepared to forego this provision of the Byelaw in order to keep electricity rates stable.

In the Commission's view, Section 15(2) is drafted to protect the consumer from rate shocks and the licensee from undue financial hardships by requiring that all excess costs be recovered in one FTP.

Here, it is BEL that is saying that it does not want to increase the rate and more importantly it is prepared to forego the recovery of excess input costs for as long as a decade.

Coupled with this 2023 ARP, the Commission (on April 25, 2023) also began public consultations on a new Statutory Instrument (the "SI") to replace the existing Byelaw. Section 25(3) of the proposed new SI will remove the restrictive nature of Section 15(2) of the Byelaws and will allow the Commission to zero any Corrections over the current and upcoming FTP. The deadline for comments from the public is May 12, 2023 and the Commission anticipates that BEL will continue to lend its full support to the proposed new SI.

Given the extraordinary circumstances of this ARP 2023, where:

- (1) The strict application of Section 15(2) of the Byelaws would create a rate shock by increasing the electricity rates by \$0.0787 per kWh in one year;
- (2) the Filings were conducted during the period in which the Commission (with BEL's support) is proposing to correct the restrictive nature of Section 15(2) of the Byelaws; and

(3) Section 15(2) of the Byelaws is silent on treating a request coming from the licensee to recover excess cost over multiple FTPs, instead of saddling the consumer with a spike in tariffs for one year; then,

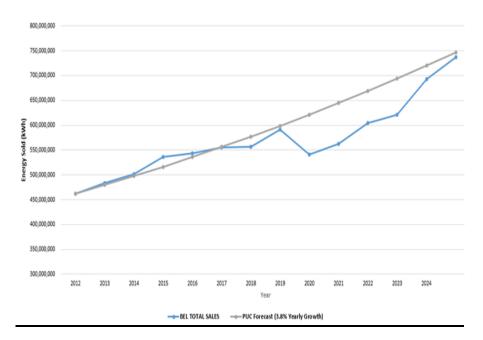
the Commission has determined that BEL shall be allowed to recover excess costs beyond the close of the existing FTP in the spirit of the proposed new SI.

In answer to <u>Question 3</u>, the Commission undertook a review of BEL's Submission and the various historical and forecasted data. The Commission determined that the \$52,000,000 being claimed by BEL for the FTP should instead be \$14,000,000. The detail calculations by the Commission are presented in Section 4 below.

#### 4 Analysis of BEL's 2023-ARP Submission

#### 4.1 Demand

The "Energy Sold" tab submitted by BEL contains datasets of historical energy demand and projected energy demand. The graph below provides a visualization of this dataset. As can be seen, BEL's actuals and projections are within the PUC's expectation of 3.8% yearly growth since 2012.

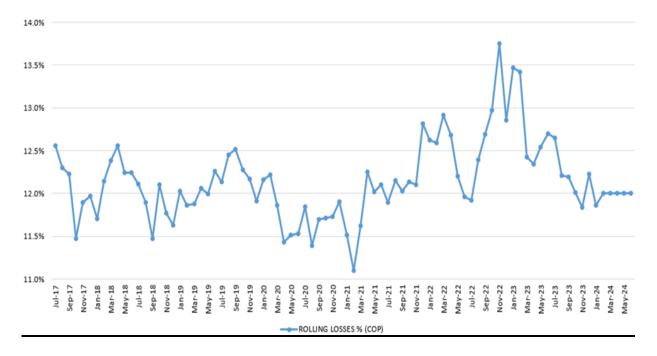


While the sales forecast for Jul-2023 to Jun-2024 provided by BEL was adopted without amendment though, the associated revenue forecast was recomputed, since BEL estimated revenues using the proposed new tariff schedules referred to above in Paragraphs 2.1.1 and 2.1.2.

#### 4.2 Losses

The data in the "Energy Sold" and "COP" was used to determine the losses, which is a ratio between energy purchased (kWh) and energy sold (kWh). Twelve-month rolling averages are applied to the dataset for losses, as a method for smoothing out the naturally occurring monthly variabilities.

Since 2017, BEL's losses were in the range of between 11.1% to 12.9%. For the Jul-2022 to Jun-2023 period, BEL used actuals data up to Feb-2023 and forecasted up to Jun-2023, where losses were calculated to be in the range of 11.8% to 13.7%. From Jul-2023 to Jun-2024 period, BEL's forecast anticipates 12% system losses up to Feb-2023, and thereafter, this number escalates to between 15% and 20%.



In the Commission's view, the forecast for system losses beyond the current FTP (after Jun-2024) is outside BEL's operating ranges and that of an efficiently operated utility.

In its 2020 FTRP Final Decision, the Commission approved a CAPEX Programme that BEL indicated would lower system losses to below 11.5%. The Commission determines that it should revert to this Final Decision and set a regulated parameter of capping system losses at no more than 12.5% with effective from ATP 2023|24 in keeping with BEL's submission for the 2020 FTRP.

#### 4.3 Energy Supply

In relation to Cost of Power, the Commission holds the view that the energy production data provided by BEL was inaccurate. It was observed that for the period Mar-22 to Dec-22, the forecasted values on "Energy Production" were used instead of the actuals, and energy purchased from Paradise Shrimp Farm - Solar had not been considered. Consequently, the Commission applied BEL's monthly dataset for the period 2022 to 2023 instead of data provided in this 2023 ARP Submission.

From the below numbers, the Commission had two observations. Firstly, BEL monthly submissions (invoices) amount to less than what has been submitted on the ARP; and secondly, once losses are adjusted to within the Commissions approved level of 12%, then there is a decrease in the quantum of energy to be purchase.

Ju1-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Total				
63,606,015	62,059,498	59,085,934	59,700,179	54,013,231	54,680,311	54,964,619	51,697,869	459,807,656				
62,180,684	65,742,653	62,687,490	61,165,424	58,510,935	52,891,534	54,935,308	51,658,116	469,772,143				
Mar-23	Apr-23	May-23	Jun-23	Total								
58,392,186	59,163,880	57,957,471	60,740,089	236,253,626								
58,265,558	59,041,336	57,830,842	60,617,545	235,755,281								
Ju1-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Total
62,307,313	65,869,281	62,810,034	61,259,019	58,601,511	52,985,130	62,769,261	64,671,423	65,154,127	65,407,743	64,192,059	67,204,944	753,231,844
62,180,684	65,742,653	62,687,490	61,165,424	58,510,935	52,891,534	62,781,894	64,818,934	71,654,414	68,404,225	66,981,156	66,771,868	764,591,210
	63,606,015 62,180,684 Mar-23 58,392,186 58,265,558 Jul-23 62,307,313	63,606,015 62,059,498 62,180,684 65,742,653 Mar-23 Apr-23 58,392,186 59,163,880 58,265,568 59,041,336 Jul-23 Aug-23 62,307,313 65,869,281	63,606,015 62,059,498 59,085,934 62,180,684 65,742,653 62,687,490 Mar-23 Apr-23 May-23 58,392,186 59,163,880 57,957,471 58,265,558 59,041,336 57,830,842 Jul-23 Aug-23 Sep-23 62,307,313 65,869,281 62,810,034	63,606,015 62,059,498 59,085,934 59,700,179 62,180,684 65,742,653 62,687,490 61,165,424  Mar-23 Apr-23 May-23 Jun-23 58,392,186 59,163,880 57,957,471 60,740,089 58,265,558 59,041,336 57,830,842 60,617,545  Jul-23 Aug-23 Sep-23 Oct-23 62,307,313 65,869,281 62,810,034 61,259,019	63,606,015         62,059,498         59,085,934         59,700,179         54,013,231           62,180,684         65,742,653         62,687,490         61,165,424         58,510,935           Mar-23         Apr-23         May-23         Jun-23         Total           58,392,186         59,163,880         57,957,471         60,740,089         236,253,626           58,265,558         59,041,336         57,830,842         60,617,545         235,755,281           Jul-23         Aug-23         Sep-23         Oct-23         Nov-23           62,307,313         65,869,281         62,810,034         61,259,019         58,601,511	63,606,015 62,059,498 59,085,934 59,700,179 54,013,231 54,680,311 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,880 67,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130	63,606,015 62,059,498 59,085,934 59,700,179 54,013,231 54,680,311 54,964,619 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,880 67,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281 Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130 62,769,261	63,606,015 62,059,498 59,085,934 59,700,179 54,013,231 54,680,311 54,964,619 51,697,869 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 51,658,116    Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,880 67,957,471 60,740,089 236,253,626    58,265,558 59,041,336 67,830,842 60,617,545 235,755,281    Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130 62,769,261 64,671,423	63,606,015 62,059,498 69,085,934 59,700,179 54,013,231 54,680,311 54,964,619 51,697,869 459,807,656 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 51,658,116 469,772,143  Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,880 67,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281  Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130 62,769,261 64,671,423 65,154,127	63,606,015 62,059,498 69,085,934 59,700,179 54,013,231 54,680,311 54,964,619 51,697,869 459,807,656 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 51,658,116 469,772,143  Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,808 57,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281   Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 62,307,313 65,869,281 66,810,034 61,259,019 58,601,511 52,985,130 62,769,261 64,671,423 65,154,127 65,407,743	63,606,015 62,059,498 59,085,934 59,700,179 54,013,231 54,680,311 54,964,619 51,697,869 459,807,656 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 51,658,116 469,772,143  Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,800 57,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281  Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130 62,769,261 64,671,423 65,154,127 65,407,743 64,192,059	63,606,015 62,059,498 59,085,934 59,700,179 54,013,231 54,680,311 54,964,619 51,697,869 459,807,656 62,180,684 65,742,653 62,687,490 61,165,424 58,510,935 52,891,534 54,935,308 51,658,116 469,772,143  Mar-23 Apr-23 May-23 Jun-23 Total 58,392,186 59,163,800 57,957,471 60,740,089 236,253,626 58,265,558 59,041,336 57,830,842 60,617,545 235,755,281  Jul-23 Aug-23 Sep-23 Oct-23 Nov-23 Dec-23 Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 62,307,313 65,869,281 62,810,034 61,259,019 58,601,511 52,985,130 62,769,261 64,671,423 65,154,127 65,407,743 64,192,059 67,204,944

Having adjusted BEL's forecast based on the above, the Commission estimates the required energy to be supplied by BEL will reduce from 764,591,210 kWh to 753,231,844 kWh for the upcoming ATP.

#### 4.4 Cost Of Power

As indicated, the Commission made a comparison between BEL's Submission and the actual invoices submitted to the PUC by BEL in their monthly reporting and have made a few general observations:

4.4.1 The COP for ATP 2021|2022 is unusually high. This is because the Hydro production was lower than had been projected. The expected normal production is 160 GWh for Chalillo and Mollejon and the actual production was below 100 GWh. Given this, the average rate for Chalillo and Mollejon was BZD\$0.2628, while the average rate for VACA was \$0.3180 per KWh.

To compensate for this shortfall in production, BEL had to rely on more expensive incountry generation and therefore the COP average for the ATP 2021|2022 was \$0.2640 per KWh.

The Commission continues to raise concern for prudent dispatching (particularly given the realities of global warning) and refers to comments made in previous Decisions on this topic.

4.4.2 For the month of December 2021, the comparison showed a difference of \$1.593M for CFE Calificados. This difference is the extraordinary expense incurred in the COP for February 2021 and this adjustment has been applied by the Commission in favor of BEL in the correction made on the ARP 2022. As such, the Commission excluded these charges once again.

4.4.3 The Commission notes once more that there are significant variances between what BEL submitted in ARP 2023 and the monthly invoices that are forwarded to the PUC.

The most significant differences are related to interest and other charges associated with payments to BECOL. Again, in December 2021 for example, the amount submitted by BEL for BECOL (Mollejon and Chalillo) was 50% more than the invoices received by the PUC for the same month.

These charges are derived from interest and other charges on arrears owed to BECOL when there is a scarcity of United States Dollars, particularly during the height of COVID-19.

The Commission holds all Independent Power Producers to a Resolution that was signed at the onset of the COVID-19 Pandemic. In the case of BECOL, on March 27, 2020, Mr. Lynn Young executed the said Resolution on BECOL's behalf and committed at that time "notwithstanding any legal or contractual rights, to implement such reasonable measures or processes to avoid imposing additional economic hardship on customers and clients who may already be suffering same as a direct or indirect consequence of the pandemic."

In the Commission's view, a claim for interest charges for payments due by BEL to BECOL (during a time when there was an economic shutdown of the country and US Dollars were scarce) amounts to additional economic hardship on BEL customers. As such the Commission continues to deny recovery of such interest payments to BECOL and calls upon BEL to revisit this claim in the spirit of the Resolution that was executed by BECOL at the beginning of the pandemic.

In addition to disallowing the payments to CFE and the Interest and other charges to BECOL, the Commission also made the following decisions as it related to COP:

- (i) To retain a capacity charge for the Caye Caulker Plant between January and June 2024 and maintain the Plant as standby up to the end of the FTP.
- (ii) To adopt the forecasted rate for CFE for March 2023 to June 2024.
- (iii) To require that all charges applied to COP Overhead must be supported by invoices commencing from the ATP under review. This, given that BEL is forecasting for COP Overhead to exceeds the range of usual expenditure and the cap of \$950,000 set by the Commission,
- (iv) BEL COP for March 2022 December 2022 does not contain actual costs incurred. Instead, BEL treated prior year's forecast as actuals for this period by referencing its energy production spreadsheet, instead of entering actual.

After considering and making the necessary adjustments based on the above observations and decision, the Commission estimates that the Reference Cost of Power should be \$0.2422 per Schedule 3 below, instead of BEL's estimate of \$0.2495 for the next ATP.

#### **Belize Electricity Limited (BEL)**

### Updated Cost of Power (COP) Parameters and Demand for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024 Rate Review for ARP 2023 | 2024

Approved Generation and Purchase of Power and Reference Cost of Power (COP), and Demand for each ATP of the FTP:

Year	2020-2021	2021-2022	2022-2023	2023-2024
KWHrs Purchased and Generated - KWHrs	611,437,802	669,368,687	696,061,283	753,231,844
Reference Cost of Power - \$	118,067,620	154,610,675	160,333,916	159,989,341
Approved Consumption/Demand - KWHrs	534,376,841	585,706,369	614,614,608	660,521,472
Reference Cost per KwHr Consumed - \$/KWHr	0.2209	0.2640	0.2609	0.2422

#### 4.5 Corrections

The Commission has determined that BEL's claim for Corrections differ from the Commission's calculation due to the following:

- 4.5.1 BEL submitted that in its last ATP, it collected \$235,332,346; however, BEL Monthly Revenue Reports in this same period record collection in the sum of \$236,251,598. BEL provided no explanation for the difference in the sum of \$919,251 and as such, the Commission has determined that it should accept the \$236,251,598 as submitted in the monthly reports.
- 4.5.2 In reporting its Tariff Basket Revenue ("TBR"), BEL declared the sum of \$258,919,000, while the Commission calculates the TBR to be \$253,530,191. The main reason for the difference is the corrections made to COP and RAV by the Commission during these proceeding.
- 4.5.3 BEL failed to record the sum of \$3,780,324, representing the penalty for the Company's failure to interconnect Caye Caulker to Ambergris Caye pursuant to the PUC's Decision in ARP 2018 and the subsequent recommendation of Independent Expert, Mr. Ian McMillian.

Based on the above, Schedule 1 is adjusted accordingly as follows:

# Schedule 1 Belize Electricity Limited (BEL) Annual Corrections - July 1, 2020 to June 30, 2021

General Corrections - July 1, 2020 - June 30, 2021		BEL Submission
<sup>1</sup> Approved Tariff Basket Revenue - \$	253,530,191	258,919,001
<sup>2</sup> Realized Tariff Basket Revenue - \$	236,251,598	235,332,346
Variance (Total Approved less Total Realized) - \$	17,278,594	
3 less: Disallowed Costs - CCK Penalty	-3,780,324	
Approved Corrections for 2020   21 ATP - \$	13,498,270	23,586,655

#### 4.6 OPEX, Other Revenue, Taxes

The Commission maintained Operating Expenses as approved in FTRP 2020 and accepted other revenues as submitted by BEL. Taxes are calculated at 1.75% and License fee ATP 2023|2024 is adjusted to 1% as of Jan-2024 subject to an assessment of Licence Fee under Section 8(3) of the Electricity Act.

#### 4.7 Regulate Asset Value

BEL submitted an estimate Regulated Asset Value ("RAV") for the year ending 2021 in the sum of \$392,321,529 and for the year ending 2022 to be \$406,660,334. For the same period, the depreciation is calculated as \$18,220,765 and \$18,402,278 respectively.

The Commission has determined that the Regulated Asset Value for the year ending 2021 should amount to \$378,032,416 and for the year ending 2022 as \$396,357,100. Similarly, for the same period, depreciation is calculated as \$18,195, 859 and \$18,056,340 respectively.

The difference between BEL's and the Commission's totals are shown below:

#### 4.7.1 Fixed Assets

The BEL Fix Asset Register for calendar year 2021 was submitted in May of 2022. This submission was not included in the ARP 2022|23 since the Initial Decision had to be made by the Commission on the 30th of April 2022.

Once again, BEL has failed to provide its Asset Register for calendar year 2022, which the Commission would have found most useful in reviewing ATP 2022|23. Therefore, it was impossible to validate the fixed assets, construction works in progress and capital addition values for 2022.

The significance of having the Asset Register can be underscored by comparing what BEL reported in 2022 ARP versus what it formally filed later that year. BEL submitted an estimated fixed asset value of \$533 Million Dollars, while in their official filing in May of 2022, the Company declared \$517 Million, a difference of \$16 Million Dollars.

Given that BEL has not submitted the Asset Register for 2022 and considering the importance of ensuring that the RAV must be accurate, the Commission has determined that it will not include any additions for the year 2022. The Commission also reminds BEL of its Final Decision in the 2020 FTRP where investments were capped at \$149.3 million over the FTP.

The Commission further notes that BEL's projected expenditure for the coming year suggests that it intends to invest in, among other things, Roof Top Solar and EV Charging Stations. The Commission signals BEL that it holds the preliminary view that these investments are outside the core business of the Company.

While the Commission <u>cannot</u> and <u>does not</u> intend to restrict BEL from exploring other business opportunities, it can ensure that the cost associated with these commercial ventures are not paid for by the consumers. To this end, the Commission intends to enact legislation that will require

BEL to institute accounting separation so that all costs and revenues associated with these new commercial ventures can clearly be identified and separated during the rate setting process.

#### 4.7.2 Depreciation

In BEL's submission, it estimates Depreciation to be 5%. The Commission applied its Decision in the 2022 ARP and refers BEL to Section 2.3.3.2 of that Decision where it was determined that Depreciation should not exceed 4%.

#### 4.7.3 Additions

Given the Determination made by the Commission in 4.7.1 above, there were no additions to assets in 2022.

#### 4.7.4 Interest During Construction ("IDC") and General Expenses Capitalized ("GEC")

In BEL's Submission, the Company estimates both the IDC and GEC to be \$3.8 Million. The Commission had determined in the 2020 FTRP Final Decision that IDC and GCE are to be calculated as follows:

- (i) IDC is capped at an interest rate of 8%, and the share of these investments that is permitted to be debt financed is 60%.
- (ii) GEC is revenue-capped at:
  - a. **ATP 2021**|**22**: is \$2,673,770;
  - b. **ATP 2022|23**: is \$2,713,876;
  - c. **ATP 2023**|**24**: is \$2,754,584.

In applying the Commission's Decision, the GEC recalculated at \$2.7 Million and the IDC at \$3.3 Million.

#### 4.7.5 The Commission's Calculation for RAV and Depreciation

In applying the Commission's Determinations in this Section, the following Schedule 2 reflects the recalculated RAV and Depreciation for 2022 and the projections for 2023.

## Schedule 2 Belize Electricity Limited (BEL) Approved Regulated Asset Value (RAV) for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024

Regulated Asset Value (RAV) as at December 31 of each year - \$: Validated Validated Prelim Forecast Year 2019 2020 2021 2022 2023 2024 Starting RAV 369,640,959 373,256,368 386,061,108 378,032,416 396,357,100 365,633,188 Depreciation 17.458.394 17,492,707 18.195.859 18,056,340 20,993,298 29,510,786 **Work In Progress** 16,654,000 34,708,449 41,781,449 66,591,147 0 33,288,364 Additions 53,061,000 22,029,955 37,083,000 0 108,372,596 0

-1,968,000

378,032,416

701,977

396,357,100

9,730,614

365,633,188

5,919,319

438,575,679

#### 4.8 ROR (Return of Return)

**Net Contributed Capital** 

**Ending RAV** 

BEL applied a ROR of 8% for ATP 2022|23 and 8.5% ATP 2023|24. These percentages are consistent with the Commission's Decision in 2022 ARP and were retained by the Commission.

4.9 Tariff Basket Requirements for FTP 2020|2024 as calculated by the Commission.

-732,000

386,061,108

373,256,368

		Schedule	2 5						
	Beli	ze Electricity L	imi	ted (BEL)					
BEL 2023-ARP Initial Decision Tariff Basket Revenue (TBR) and	d Compo	nents and Mear	ı Ele	ectricity Rate (M	IER	for Full Tariff Pe	riod (FTP) July 1, 2	020,	to June 30, 2024
Tariff Basket Revenue (TBR) and Rev	enue Con	•	ATP		ean	•	•		
		Actual		Actual		forecast	forecast		
Year		2020   2021		2021 2022		2022 2023	2023   2024		Total FTP
Revenue Components of TBR:									
Value Added of Delivery (VAD)									
OPEX		32.524.967		33,012,258		33,506,842	34,008,830		133.052.897
Return		38,606,111		37,803,242		31,708,568	31,078,821		139,196,741
Depreciation		17,492,707		18,195,859		18,056,340	20,993,298		74,738,203
Taxes/Licence Fees		4,863,197		5,704,429		6,220,771	7,308,775		24,097,172
Sub-Total (VAD)		93,486,982		94,715,788		89,492,521	93,389,723		371,085,014
Reference Cost of Power		118,067,620		154,610,675		160,333,916	159,989,341		593,001,551
Corrections - FTRP		8,842,163		8,842,163		8,842,163	8,842,163		35,368,653
- ARP 21 + IE 2020		-		-338,486		-338,486	-338,486		-1,015,457
- ARP 22		-		-		-5,315,848	-5,315,848		-10,631,696
- ARP 23		-		-		-	13,498,270		13,498,270
Less: Other Income		-4,254,659		-4,299,949		-4,183,426	-4,291,542		-17,029,577
Tariff Basket Revenue		216,142,105		253,530,191		248,830,840	265,773,622		984,276,758
Demand [MWhs]		534,377		585,706		614,615	660,521		2,395,219
Mean Electricity Rate (MER) - July 1, 2020 - June 30, 2024 - \$:	\$	0.4045	\$	0.4329	\$	0.4049	\$ 0.4024	\$	0.4109
Direct Cost of Delivery (COD) - \$:	Ś	0.1658	\$	0.1520	Ś	0.1355	\$ 0.1303	Ś	0.1449
Corrections + Taxes - Other Income - \$:	\$	0.0177	\$	0.0169	\$	0.0085	\$ 0.0298	\$	0.0185
Cost of Power (COP) - \$:	\$	0.2209	\$	0.2640	\$	0.2609	\$ 0.2422	\$	0.2476
Note: Figures in Colour	Red are v	erified and fixed.	The	ese figures will no	t ch	ange in the future			
MER Approved by PUC	\$	0.4084	\$	0.3999	\$	0.3999	\$ 0.3999	_	
Realized TBR (Actuals and as per Sales Report Calculations)	\$	222,913,189	\$	236,251,598	\$	-,,	\$ 264,142,537	\$	970,263,352.8082
Difference (Realized Velue is less then what the FTRP requires)			Amo	ount to be carried	ove	r on the next FTRP		\$	14,013,405.18

#### 5 CONCLUSIONS

The Commission expresses its appreciation to the Management of BEL for their Submission and expresses gratitude to the Company for granting the Commission the additional time needed to finalize this Initial Decision.

In coming to its Decision, the Commission continues to maintain the following values:

- Making informed decisions.
- Being accountable to all stakeholders.
- Conducting proper consultation with stakeholders.
- Regulating in a fair, transparent and consistent manner.
- Acting with integrity and respect.

The full details of the Commission's remodeling are included in the Notes to Schedules 1 to 7, which, along with the Order, are attached and incorporated into this Initial Decision by Reference.

Dean E. Molina (Mr.)

Issued for and on behalf of the Public Utilities Commission

#### **DECISION OF THE COMMISSION**

BELIZE:			

ORDER made by the Public Utilities Commission (hereinafter referred to as "the Commission") in exercise of the powers conferred upon it by the Public Utilities Commission Act, Chapter 223 of the Laws of Belize, Revised Edition 2020, the Electricity Act, Chapter 221 of the Laws of Belize, the Electricity (Tariff, Fees and Charges) Byelaws, and all other powers thereunto the Commission enabling.

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Short title.

1. This Order may be cited as the:

## BELIZE ELECTRICITY LIMITED 2023 ANNUAL REVIEW PROCEEDING INITIAL DECISION

Decisions and Orders.

- 2. In respect of the application made on April 2, 2023 by the Belize Electricity Limited ("BEL") for the Commission to:
- 2.1 determine the Regulated Values, Mean Electricity Rates, Tariffs, Fees and Charges in its Annual Review Proceedings Submission for the remaining Annual Tariff Period of the Full Tariff Period from July 1, 2023 to June 20, 2024;
- 2.2 to approve new customer classifications and associated tariff schedules for Distributed Generation, Electric Vehicle charging, Spanish Lookout and Tourism;
- 2.3 to adopt/approve the Least Cost Expansion Plan (LCEP) filed on March 22, 2023 and refiled on April 28, 2023; and
- 2.4 to adopt/approve BEL's new Connection Policy

The Commission hereby makes the following DECISIONS and ORDERS:

- (a) The Commission hereby approves the Annual Corrections (AC) contained in Schedule 1;
- (b) The Commission hereby approves the Regulated Asset Value (RAV) for each Annual Tariff Period (ATP) of the Full Tariff Period (FTP) as contained in Schedule 2;
- (c) The Commission hereby approves the Reference Cost of Power (COP) for each Annual Tariff Period (ATP) of the Full Tariff Period (FTP) as contained in Schedule 3;
- (d) The Commission hereby reaffirms the Target Rate of Return (ROR), the Rate of Return Lower Limit (RORLL), the Rate of Return Upper Limit (RORUL), the Operational Expenditure (OPEX), the Generalized Expenditures Capitalized (GEC) and the Gearing Ratio (G) for each Annual Tariff Period (ATP) of the Full Tariff Period (FTP) as contained in Schedule 4;
- (e) The Commission hereby approves the Value Added of Delivery (VAD), the Other Income and the Tariff Basket Revenue (TBR) for each Annual Tariff Period (ATP) of the Full Tariff Period (FTP) and the Mean Electricity Rates (MERs) for the Full Tariff Period (FTP) as contained in Schedule 5;
- (f) The Commission hereby approves the Tariffs to be applied during each Annual Tariff Period (ATP) of the Full Tariff Period (FTP) as contained in Schedule 6, and hereby orders the Belize Electricity Limited (BEL) to levy the said Tariffs in respect of the electricity services it is licenced to provide;
- (g) The Commission hereby fixes a maximum system loss of 12.5% to be applied to the remaining Annual Tariff Period (ATP) of the Full Tariff Period (FTP);
- (h) Subject to para (a) to (g) above, the Commission does not adjust any other previously approved Regulated Values, Fees and Charges, and hereby orders the Belize Electricity Limited (BEL) to continue to levy the said previously approved Fees and Charges in respect of the relevant electricity services it is licenced to provide.
- (i) The Commission ORDERS BEL to commence the implementation of a system of accounting and reporting to ensure that all financial records for commercial activities that fall outside the Company's core business are maintained separately from the financial records of the Company's core business of providing electricity to consumers.
- (j) The Commission ORDERS BEL that with immediate effect, all charges applied to COP Overhead must be supported by invoices even when such expenditure falls within the range of the cap of \$950,000 set by the Commission.

- (k) The Commission reserves its Decision on all new customer classifications proposed by BEL and associated tariff schedules for Distributed Generation, Electric Vehicle charging, Spanish Lookout and Tourism;
- (1) The Commission reserves its Decision on BEL's Least Cost Expansion Plan (LCEP) filed on March 22, 2023 and refiled on April 28, 2023;
- (m) The Commission reserves its Decision on BEL's proposed new Connection Policy;
- (n) Pursuant to sub-regulation 33(2)(b) of Statutory Instrument 145 of 2005, as amended by Statutory Instrument 116 of 2009, the Commission's written determinations for the enforcement of this Decision, once finalized, shall be binding on the Belize Electricity Limited (BEL) and any other licensee.

Amendment

This Order may be amended at any time during an Annual Review Proceedings within the Full Tariff Period, subject to the provisions of the Electricity (Tariff, Fees and Charges) Byelaws.

**MADE** by the Public Utilities Commission this day of , 2023.

(DEAN MOLINA)

Chairman, Public Utilities Commission

#### **Belize Electricity Limited (BEL)**

## Rate Review for ARP 2023 | 2024 Annual Corrections - July 1, 2021 to June 30, 2022

#### General Corrections - July 1, 2020 - June 30, 2021

<sup>1</sup> Approved Tariff Basket Revenue - \$	253,530,191
<sup>2</sup> Realized Tariff Basket Revenue - \$	236,251,598
Variance (Total Approved less Total Realized) - \$  less: Disallowed Costs - CCK Penalty	17,278,594 -3,780,324
Approved Corrections for 2020   21 ATP - \$	13,498,270

#### Notes-

<sup>&</sup>lt;sup>1</sup> **Approved Tariff Basket Revenue** is the total revenues to be derived from sales of electricity that BEL must receive from its customers to cover its operating costs, capital recovery & financing costs, statutory charges and earn a reasonable return (profit)

<sup>&</sup>lt;sup>2</sup> **Approved Tariff Basket Revenue** is the revenues BEL derived, from its customers, in respect of electricity sales

<sup>&</sup>lt;sup>3</sup> **Disallowed Costs** is as a penalty regime applied for BEL's failure to meet standards of performance set by the PUC, in respect of the interconnection of Caye Caulker to the National Grid.

### Schedule 2 Belize Electricity Limited (BEL)

#### Rate Review for ARP 2023 | 2024

Approved Regulated Asset Value (RAV) for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024

#### Regulated Asset Value (RAV) as at December 31 of each year - \$:

		Validated	Validated	Prelim	Forecast	
Year	2019	2020	2021	2022	2023	2024
Starting RAV	369,640,959	373,256,368	386,061,108	378,032,416	396,357,100	365,633,188
Depreciation	17,458,394	17,492,707	17,492,707	18,056,340	20,993,298	29,510,786
Work In Progress	16,654,000	34,708,449	41,781,449	66,591,147	0	33,288,364
Additions	53,061,000	22,029,955	37,083,000	0	108,372,596	0
Net Contributed Capital		-732,000	-1,968,000	701,977	9,730,614	5,919,319
Ending RAV	373,256,368	386,061,108	378,032,416	396,357,100	365,633,188	438,575,679

#### **Notes:**

- 1. The Depreciation and RAV for 2022 could not be properly calculated because BEL's Fixed Assets Register ending December 31, 2022 has not been filed with the PUC. As a consequence, the Commission updated the 2022 depreciation with the value from 2021 and updated the 2022 RAV to account for \$0 in capital additions made in 2021.
- 2. The Depreciation and RAV for 2021, 2022 and 2023 were recalculated to be the forward-looking business results from BEL, while significantly trimming capital additions to stay within the level of capital spending and related additions in those years, as per the 2020-FTRP Final Decision.
- 3. The Commission adopted BEL's updated Capital Contributions schedule, but requires clarity on the negative value incurred in May 2021.

#### **Belize Electricity Limited (BEL)**

Updated Cost of Power (COP) Parameters and Demand for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024

Rate Review for ARP 2023|2024

Approved Generation and Purchase of Power and Reference Cost of Power (COP), and Demand for each ATP of the FTP:

Year	2020-2021	2021-2022	2022-2023	2023-2024
KWHrs Purchased and Generated - KWHrs	611,437,802	669,368,687	696,061,283	753,231,844
Reference Cost of Power - \$	118,067,620	154,610,675	160,333,916	159,989,341
Approved Consumption/Demand - KWHrs	534,376,841	585,706,369	614,614,608	660,521,472
Reference Cost per KwHr Consumed - \$/KWHr	0.2209	0.2640	0.2609	0.2422

#### Notes-

- 1. **KWhrs Purchased and generated** is electricity supplied by IPP's and BEL-operated power plants for resale to customers expressed in units of kWhs. The PUC recalculated these monthly values utilizing BEL's projected system losses, as **Consumption/(1-Losses).**
- 2. **Reference Cost of Power** is the total costs for the electricity supplied by IPP's and BEL-operated power (Actuals to Feb-2023 and Projected) expressed in BZ Dollars.
- 3. **Approved Consumption/Demand** is electricity sales expressed in units of kWhs. In its RSM modeling, the Commission adopted BEL's monthly values, after correcting computational errors, for the entirety of the FTP

#### **Belize Electricity Limited (BEL)**

#### Rate Review for ARP 2023 | 2024

Approved Rate of Return (ROR), OPEX and Gearing Ratio (G) for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024

#### Approved Rate of Return (ROR) for each ATP of the FTP - %:

Period	2020-21	2021-22	2022-23	2023-24
ROR Lower Limit	8	8	8	8
ROR Target Value	10	10	8	8.5
ROR Upper Limit	12	12	12	12

#### Approved OPEX for each ATP of the FTP - \$:

Period	2020-21	2021-22	2022-23	2023-24
OPEX	32,524,967	33,012,258	33,506,842	34,008,830
GEC	2,615,387	2,654,419	2,708,677	2,751,442

Approved Gearing Ratio (G)- FTP:	0.6	
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Interest Rate for IDC (after approved	
Gear Ratio)	8%

#### **Notes:**

- 1. The Commission adjusted the Target Rate of Return (t-ROR) used in the RSM for determining the Return (profitability) on the BEL's RAV (rate base):
  - (i) In its FTRP 2020 Final Decision, the Commission had approved a ROR of 10% applicable for each ATP;
  - (ii) In its 2022 ARP Initial Decision the Commission has fixed the ROR for the 2022\23 ATP at 8% and the ROR for the 2023|24 ATP at 8.5%.
- 2. All other regulated values in Schedule 4 remain unchanged as approved in the FTRP 2020 Final Decision.

### Schedule 5 Belize Electricity Limited (BEL)

BEL 2023-ARP Initial Decision Tariff Basket Revenue (TBR) and Components and Mean Electricity Rate (MER) for Full Tariff Period (FTP) July 1, 2020, to June 30, 2024

Tariff Basket Revenue (TBR) and Revenue Components for each ATP of the FTP and Mean Electricity Rate for the FTP - \$:

		Actual		Actual	forecast	forecast		
Year		2020 2021		2021 2022	forecast 2022 2023	2023 2024		Total FTP
i eai		2020 2021		2021 2022	2022 2023	2023 2024		TOTALLET
Revenue Components of TBR:								
Value Added of Delivery (VAD)								
OPEX		32,524,967		33,012,258	33,506,842	34,008,830		133,052,897
Return		38,606,111		37,803,242	31,708,568	31,078,821		139,196,741
Depreciation		17,492,707		18,195,859	18,056,340	20,993,298		74,738,203
Taxes/Licence Fees		4,863,197		5,704,429	6,220,771	7,308,775		24,097,172
Sub-Total (VAD)		93,486,982		94,715,788	89,492,521	93,389,723		371,085,014
Reference Cost of Power		118,067,620		154,610,675	160,333,916	159,989,341		593,001,551
Corrections - FTRP		8,842,163		8,842,163	8,842,163	8,842,163		35,368,653
- ARP 21 + IE 2020		- ·		-338,486	-338,486	-338,486		-1,015,457
- ARP 22		_		-	-5,315,848	-5,315,848		-10,631,696
- ARP 23		-		-	-	13,498,270		13,498,270
Less: Other Income		-4,254,659		-4,299,949	-4,183,426	-4,291,542		-17,029,577
Tariff Basket Revenue		216,142,105		253,530,191	248,830,840	265,773,622		984,276,758
Demand [MWhs]		534,377		585,706	614,615	660,521		2,395,219
Mean Electricity Rate (MER) - July 1, 2020 - June 30, 2024 - \$:	\$	0.4045	\$	0.4329 \$	0.4049	\$ 0.4024	\$	0.4109
Direct Cost of Delivery (COD) - \$:	\$	0.1658	\$	0.1520 \$	0.1355	\$ 0.1303	\$	0.1449
Corrections + Taxes - Other Income - \$:	\$	0.0177	\$	0.0169 \$	0.0085	\$ 0.0298	\$	0.0185
Cost of Power (COP) - \$:	\$	0.2209	\$	0.2640 \$	0.2609	\$ 0.2422	\$	0.2476
Note: Figures in Colour	Red are v		•			 0.2422	۲	0.24

MER Approved by PUC

Realized TBR (Actuals and as per Sales Report Calculations)
Difference (Realized Value is less then what the FTRP requires)

\$ 0.4084	\$	0.3999	\$	0.3999	\$	0.3999	
\$ 222,913,189	\$	236,251,598	\$	246,956,029	\$	264,142,537	\$ 970,263,352.8082
,	٩mo	unt to be carried	ove	r on the next FTRF	)		\$ 14,013,405.18

# Belize Electricity Limited (BEL) Rate Review for ARP 2023 | 2024

Approved Tariffs for Full Tariff Period (FTP) - July 1, 2023, to June 30, 2024

#### **FULL SERVICE TARIFFS**

Customer Class	Service Type/ Consumption Block	Rate/Tariff \$/Mth; \$/KVA; \$/KWhr
Social	0 - 60 KWhrs	0.22 5.00
	Minimum Charge	5.00
Residential	0 - 50 KWhrs	0.33
	51 - 200 KWhrs	0.38
	> 200 KWhrs	0.43
	Minimum Charge	10.00
Commercial 1	0 - 50 KWhrs	0.33
commercial 1	51 - 200 KWhrs	0.38
	> 200 KWhrs	0.43
	Minimum Charge	10.00
Commercial 2	Service Charge 0-10,000 KWhrs 10,001-20,000 KWhrs > 20,000 KWhrs	150.00 0.41 0.39 0.38
Industrial 1	Service Charge Demand (KVA) Energy	250.00 35.82 0.30
Industrial 2	Service Charge Demand (KVA) Energy	250.00 23.00 0.26
Street Lights	Energy	0.45

### Belize Electricity Limited (BEL) Approved Fees and Charges effective July 1, 2020

Service Fees and Charges/Penalties:							
Description	Customer Classification	Fee/Charge (\$, %					
New Connection		200.00					
Temporary Supply		200.00					
Service Upgrade / Service Relocation		55.00					
Move In/Activation/Transfer		40.00					
Temporary Disconnection by Request	Social	10.00					
Reconnection (after Temporary Disconnection by Request)	Residential, Commercial 1 & 2	15.00					
	Commercial 2 with CT Meter & Industrial	100.00					
Reconnection (Disconnection for Non-payment)	Social	10.00					
, , , , , , , , , , , , , , , , , , , ,	Residential, Commercial 1	15.00					
	Commercial 2	25.00					
	Commercial 2 with CT Meter & Industrial	150.00					
Reconnection at Pole (Disconnection for Non-Payment or Tampering)		150.00					
Returned Cheque		25.00					
Replacement of damaged Meter		150.00					
Replacement of damaged Meter Cover		50.00					
Replacement of Meter due to Service/Meter Tampering*		40.00					
Pole Rental (Monthly Fees per attachement per Pole)	Telecommunications Operators (PSTN, Etc.)	2.75					
	Cable Operators - Cities/Towns	1.50					
	Cable Operators - Rural	1.20					
Late Payment Penalty (Applied to Arrears over 30 days less Deposit)	Commercial 2, Industrial	0.83%/Month					
Deposits:							
Service Size	Customer Classification	Fee/Charge (\$)					
60 Amps Service	Residential	50.00					
	Commercial 1	100.00					
100 Amps Service - 45 kVA Dedicated Service	Residential	100.00					
	Commercial 1	200.00					
	Commercial 2	1,000.00					
112.5 kVA Dedicated Service		3,000.00					
225 kVA Dedicated Service		8,000.00					
500 kVA Dedicated Service		15,000.00					
1000 kVA Dedicated Service		30,000.00					

#### Notes:

The Commercial 1 category shall be applied to commercial customers with average monthly consumption less than 2,500 kilo-watthours.

The Commercial 2 category shall be applied to commercial customers who are not classified as Commercial 1 or Industrial.

Where any requested service requires that extraordinary costs be incurred by a Licensee, the Licensee may recover some or all of such costs as determined according to a relevant methodology contained in any relevant and approved Code of Practice required by the Conditions of the Licence granted to such Licensee.

<sup>\*</sup> To be applied, together with other applicable fees/charges/penalties, after summary conviction for Service/Meter Tampering.