

4 Princess Margaret Drive Marina Towers 2nd Floor PO Box 300 Belize City, Belize

December 23, 2022

Mr. John Mencias Chief Executive Officer Belize Electricity Limited Belize City

Dear Mr. Mencias,

Enclosed please find the Belize Electricity Limited 2022 Annual Review Proceeding Final Decision Amendment as made by the Public Utilities Commission on December 23, 2022.

The Belize Electricity Limited 2022 Annual Review Proceeding Final Decision Amendment provides for no amendments to the tariffs, fees and charges to be levied for electricity services for the period January 1, 2023 to June 30, 2023.

Also enclosed is the commentary on the decision.

Best regards,

Dean Molina Chairman,

PUC

Cc: Hon. Michel Chebat SC - Minister of Energy, Public Utilities, Logistics & E-Governance

Tel: (501)223-4938 : Fax: (501) 223-6818 : Email: <u>info@puc.bz</u> : Web: <u>www.puc.bz</u>

Comments related to the Draft Decision

Issued by the Commission in respect of the Annual Review Proceedings Amendment 2022 (ARP 2022 Amendment) for Belize Electricity Limited (BEL) December 2022

1. BACKGROUND

In its ARP 2022 Final Decision, the Public Utility Commission (the "Commission" or "PUC") approved a mean electricity rate (MER) of BZ\$0.3999/kWh for the period July 1, 2022, to June 30, 2024.

On December 10, 2022, BEL filed for an amendment to the already approved ARP 2022 Decision (the "Amendment Submission"). This is pursuant to Section 33(2) of the Electricity (Tariffs, Fees and Charges Standards) Byelaws, S.I. 145 of 2005 as amended by S.I. 116 of 2009 and S.I. 21 of 2012 (the "Byelaws").

The Amendment Submission seeks to amend the ARP 2022 Final Decision to reflect actual business results for the recent March to October 2022 period and to update projections for November 2022 to June 2024 of the ATPs 2022|23 and 2023|24.

In its submission, BEL reports that there is an under collected balance of \$28,467,256 due to the higher Cost of Power ("COP") over and above what was provided for in electricity tariffs during the period July 1, 2021 to December 31, 2022 as follows:

-	Actuals				PUC.	Difference			
Period		COP	Sales kWh	RCOP/kWh		RCOP			ctuals-RCOP
Jul - Dec 2021	\$	76,265,720	299,281,254	\$	0.2254	\$	67,457,995	\$	8,807,725
Jan - Jun 2022	\$	82,158,700	286,425,115	\$	0.2254	\$	64,560,221	\$	17,598,479
Jul - Dec 2022	\$	78,000,343	310,463,167	\$	0.2446	\$	75,939,291	\$	2,061,052
COP overspent by BEL							\$	28,467,256	
Net value of COP overspent by BEL						\$	28,467,256		

BEL has also requested that the PUC recognize an additional \$14,746,445 for excess costs on electricity purchases that the company anticipates it will incur between January and June of 2023.

Cumulatively, the Amendment Submission from BEL estimates that the excess Cost of Power over the ATPs 2021|22 and 2022|23 will be \$43,213,701.

BEL indicates that it is not seeking to recover the excess in COP, but rather it intends to register the sum of \$43,213,701 with the PUC as recoverable under future tariff adjustments and *pending further analysis* and recommendations to be submitted in the upcoming 2023 Annual Review Proceedings (PUC's Emphasis). The Commission will not repeat, here, its opinion given in its Decision relating to the 2022 Annual Tariff Review Proceeding ("ARP – 2022"), regarding the restriction imposed upon it by Section 15(2) of the Electricity (Tariffs, Fees, and Charges) Byelaws. Nevertheless, the Commission continues to guide itself accordingly.

As a matter of record, BEL's estimate of under collection amounting to \$43,213,701 would result in an increase of tariffs by a minimum of \$0.046 cent per kWh over the Full Tariff Review Period. This, during a period when ratepayers are still experiencing economic hardship driven by COVID-19. As such, any increase in tariffs on ratepayers must be absolutely justified and supported.

Table 1 reflects BEL's submission:

Table 1

		 			Tabl	<u>e 1</u>								
					Cost of Powe	r Variance								
		BEL	Ac	tuals Cost	of Power vs Pl	UC Reference C	ost	of Power						
Month	BEL Cost of Power Sold	Control Center	В	EL COP Sold (excl CC)	MWH Sold Actuals	PUC Unit Reference Cost of Power	Cost of Wholesale				'	/ariance (BEL CoP - PUC RCoP)	To	tal Variance
Jul-21	\$ 11,961,726	\$ 87,819	\$	11,873,907	52,930.43		\$	11,930,520	s	(56,613)	┪			
Aug-21	\$ 12,393,491	\$ 64,218	\$	12,329,273	52,984.95		\$	11,942,808	ŝ	386,465				
Sep-21	\$ 13,822,261	\$ 66,900	\$	13,755,361	51,553.78		\$	11,620,221	\$	2,135,141	1			
Oct-21	\$ 16,007,191	\$ 84,629	\$	15,922,562	51,441.58	0.2254	\$		\$	4,327,629		8,807,72		
Nov-21	\$ 10,001,912	\$ 112,999	\$	9,888,913	47,029.26		\$	10,600,394	\$	(711,481)				
Dec-21	\$ 12,590,884	\$ 95,182	\$	12,495,702	43,341.25		\$	9,769,118		2,726,584				
Jan-22	\$ 10,606,663	\$ 55,723	\$	10,550,940	44,210.00		\$		\$	586,007				
Feb-22	\$ 10,723,788	\$ 75,515	\$	10,648,273	40,484.04		\$	9,125,104	\$	1,523,169	\$ 17,59			
Mar-22	\$ 13,006,455	\$ 67,962	\$	12,938,493	44,096.21		\$	9,939,286	\$	2,999,206				
Apr-22	\$ 15,637,120	\$ 93,951	\$	15,543,169	51,242.96	0.2254	\$	11,550,162	\$	3,993,007		17,598,47		
May-22	\$ 16,979,690	\$ 71,652	\$	16,908,038	52,092.87		\$	11,741,732	\$	5,166,307				
Jun-22	\$ 15,639,478	\$ 69,692	\$	15,569,786	54,299.04		\$	12,239,003	\$	3,330,783				
Jul-22	\$ 16,200,619	\$ 89,130	\$	16,111,489	54,178.76		\$	13,252,125	\$	2,859,364	Т			
Aug-22	\$ 15,950,961	\$ 57,380	\$	15,893,581	54,567.96		\$	13,347,322	\$	2,546,259				
Sep-22	\$ 14,995,829	\$ 131,900	\$	14,863,929	54,865.51		\$	13,420,104	\$	1,443,825				
Oct-22	\$ 11,039,120	\$ 76,034	\$	10,963,086	52,359.03	0.2446	\$	12,807,019	Ś	(1,843,933)	\$	2,061,052		
Nov-22	\$ 10,209,865	\$ 125,736	\$	10,084,129	47,245.95		\$	11,556,360	\$	(1,472,231)				
Dec-22	\$ 10,209,865	\$ 125,736	\$	10,084,129	47,245.95		\$	11,556,360	\$	(1,472,231)				
Jan-23	\$ 13,351,481	\$ 113,944	\$	13,237,537	48,729.18		\$	11,919,158	Ś	1,318,378	_			
Feb-23	\$ 13,843,184	\$ 113,944	\$	13,729,240	50,268.54		\$	12,295,686	\$	1,433,555				
Mar-23	\$ 15,162,609	\$ 118,444	\$	15,044,165	50,668.82		\$	12,393,592	\$	2,650,572				
Apr-23	\$ 15,981,242	\$ 113,944	\$	15,867,298	50,809.72	0.2446	\$	12,428,059	\$	3,439,240	\$ 14,7	14,746,445		
May-23	\$ 15,656,653	\$ 113,944	\$	15,542,709	49,772.99		\$	12,174,472	\$	3,368,237				
Jun-23	\$ 15,415,239	\$ 118,444	\$	15,296,795	52,168.16		\$	12,760,332	\$	2,536,463				

\$ 43,213,701

2. ISSUES BEFORE THE COMMISSION

The Commission conducted a review of the submission made by BEL with the objective of arriving at its Decision. In reviewing the submission, the Commission contemplated the following questions:

- Question 1 Whether BEL sufficiently demonstrated that it incurred a higher Cost of Power ("COP") over and above what was provided for in electricity tariffs during the period July 1, 2021, to December 31, 2022?
- Question 2 Whether BEL sufficiently demonstrated that it would continue to incur excess costs on electricity purchases between November 2022 to end of the FTP?
- Question 3 Whether in all instances, BEL's dispatching promotes fairness, minimizes costs and provides for better rate stability for its consumers?

In answering Question 1, the Commission found that BEL's submission did not meet with the Commission's requirements in three ways.

First, BEL used the Reference Cost of Power ("RCOP") approved in the ARP 2021 Decision of \$0.2254, rather than the RCOP approved in the 2022 ARP Decision being \$0.2563. Secondly, the PUC can only include costs incurred in retail electricity rates that are supported by IPP invoices and proper supporting documentation. The PUC could not account for the sum of \$3,855,956 and as such BEL's submission was adjusted to reflect the supporting invoices. Third, in December 2021, BEL appeared to have restated its claim for an additional \$1.550 million surcharge allotted to February 2021 purchases from CFE. This, in fact, had already been accounted for in the PUC's 2021 (ARP 2021 Amendment) Decision for Belize Electricity Limited.

By adjusting BEL's submission to reflect the above, BEL's excess Cost of Power for the period amounted to \$4,405,218, rather than the \$26,406,204 claimed in accordance with the following table:

Table 2

	_			Table .	4						
Cost of	Cost of Power Variance PUC applied due diligence to COP and Forecast										
BEL											
Month	PUC COP Invice and Projections		MWH Sold Actuals	PUC Unit Reference Cost of Power ARP		PUC Reference Cost of Wholesale		Variance (BEL CoP - PUC RCoP)		Total Variance	
Jul-21	\$	11,899,149	52,930.43		\$	13,566,070	\$	(1,666,921)			
Aug-21	\$	12,357,885	52,984.95			13,580,044	\$	(1,222,158)			
Sep-21	\$	13,433,835	51,553.78	0.3563	\$	13,213,233	\$	220,602		12 100 501	
Oct-21	\$	15,594,758	51,441.58	0.2563	\$	13,184,478	\$	2,410,280	\$	(3,409,681	
Nov-21	\$	9,362,763	47,029.26		\$	12,053,598	\$	(2,690,835)			
Dec-21	\$	10,647,715	43,341.25		\$	11,108,363	\$	(460,648)			
Jan-22	\$	10,359,223	44,210.00		\$	11,331,022	\$	(971,799)			
Feb-22	\$	10,445,670	40,484.04		\$	10,376,060	\$	69,610			
Mar-22	\$	12,949,161	44,096.21	0.2562	\$	11,301,859	\$	1,647,302	4		
Apr-22	\$	15,482,532	51,242.96	0.2563	\$	13,133,570	\$	2,348,962	\$	7,814,899	
May-22	\$	16,789,027	52,092.87		\$	13,351,401	\$	3,437,626			
Jun-22	\$	15,200,042	54,299.04		\$	13,916,843	\$	1,283,198			

In answering Question 2, the Commission observed the following:

- (a) The forecast for the months of November and December 2022 are identical and may have been a data entry error;
- (b) Since BEL's forecast was only up to June 2023, the Commission was unable to assess the impact of excess COP over the entire FTP;
- (c) Although BEL supplied a forecast from CFE Calificados, it did not show how the company utilized the CFE Calificados forecast to develop its own forecast for CFE prices;
- (d) The forecast contemplates a drought year for 2023, as the estimated production from Chalillo and Mollejon are calculated below the normal production levels even though the dam levels are at their highest currently.

- (e) Demand Forecast from November 2022 and beyond was different from actual consumption patterns seen before and after the pandemic. As an example, while February has historically been the month in which consumption of electricity falls to the lowest level, this pattern has shifted in BEL's latest forecast.
- (f) The forecasted loss for the period has increased from a regulated value of 12.0% as established in the FTRP 2020 (see Schedule 3), to a new levelized value of 13.5% for the upcoming period. This is contrary to the commitments made by BEL in the FTRP 2020 and previous associated CAPEX justification filings, wherein investments by the Licensee would result in lower losses.
- (g) BEL does not consider any of the recommendations from the Least Cost Expansion Plan that was developed by Siemens.

The Commission holds the view that these factors could lead to an overestimation of net generation and COP. As such, BEL has not provided sufficient justification or analysis to demonstrate that it would continue to incur excess costs on electricity purchases between November 2022 and June 2024.

Given the Commission's answers to Questions 1 and 2 above, and the fact that BEL had indicated the need to submit further analysis and recommendations in the upcoming 2023 Annual Review Proceedings, the Commission determined that it will not undertake to answer Question 3 at this time.

Nevertheless, the Commission observes that between January and July 2022, the water level at the Chalillo Dam continued to rise during the dry season, leading to excess quantities/spills during the wet season. Additionally, while the Dam levels rose during the dry season, BEL utilized BAPCOL (a backup source of power) to supplement the underutilization of the Dam.

3. COMMISSION DETERMINATION

- 1. Regarding the submission made by BEL; the Commission determined the following:
 - a) BEL's ARP 2022 Amendment Submission is rejected;
 - b) BEL is to undertake a more rigorous analysis and consideration to be prepared for and submitted in the upcoming 2023 Annual Review Proceedings.
 - c) Schedule 6 of ARP 2022 Final Decision, Schedule of Tariffs, Fees and Charges remains unchanged for the January 1, 2023 to June 30, 2024.

4. OTHER MATTERS AND DETERMINATIONS

1. The Commission repeats that the burden rests with BEL to satisfy the Commission that its actions are prudent and its requests for rate increase justifiable or to prove the contrary.

The Commission remains committed to balancing the interests of the public and licensees. And to that end, BEL is reminded that it must continue to provide true copies of all invoices, inclusive of supplies from BEL's facilities, and reconciliation worksheets.

2. The Commission reiterates that in the dispatch of electricity, BEL should exercise prudence in making decisions based on information reasonably discernible at the time the decision is taken. Any such act or decision taken by BEL is expected to accomplish the delivery of service at the lowest reasonable cost consistent with good utility practices, that is, based on cost effectiveness, reliability, safety and expedition.

In determining what satisfies sound decision making on the part of BEL, in any dispatch decision, in the Commission's view it is not inherently reasonable and prudent solely because that is how electricity had been dispatched historically in a given month or period. Instead, BEL must show that its decision-making process was sound based on the options available at the time and that the course of action taken fell within the bounds of reasonableness, despite the outcome.

In this regard, the Commission notes that BEL has failed to comply with Order 2 (d) of the BELIZE ELECTRICITY LIMITED 2021 ANNUAL REVIEW PROCEEDING FINAL DECISION AMENDMENT, wherein the Licensee was required to file an updated monthly dispatch and production costings modeling for the remainder of 2021 and all of 2022.

The Commission is of the view that this information is critical for the proper management of COP. As such, the Commission intends to monitor dispatch more closely and to this end, it is necessary for BEL to supply detail dispatch information on a daily basis moving forward.

BEL is urged to comply with Orders of the PUC, otherwise the licensee may become subjected to a penalty regime in the future.

DECISION OF THE COMMISSION

R	F	ľľ	7	\mathbf{E} :
1 3	Ľ.			1.

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.

Short title. 1. This Order may be cited as the:

BELIZE ELECTRICITY LIMITED 2022 ANNUAL REVIEW PROCEEDING FINAL DECISION AMENDMENT

Decisions and Orders.

- 2. In respect of the Final Decision for the 2022 Annual Review Proceeding (ARP) for the Belize Electricity Limited (BEL) for the determination of Regulated Values, Mean Electricity Rates, Tariffs, Fees and Charges for the Annual Tariff Period (ATP) of July 1, 2022, to June 30, 2023, the Commission hereby makes the following Decisions and Orders:
- (a) The Commission hereby reaffirms the Tariffs contained in the Schedule 6 of the ARP 2022 Final Decision for the period January 1, 2023 to June 30, 2023 and orders BEL to levy the said Tariffs in respect of the relevant services it is licensed to provide;
- (b) The Commission approves no adjustments to any other previously approved Regulated Values, Mean Electricity Rates and Tariffs, Charges and Fees contained in the BELIZE ELECTRICITY LIMITED 2020-2024 FULL TARIFF REVIEW PROCEEDING FINAL DECISION and any other relevant BELIZE ELECTRICITY LIMITED ANNUAL REVIEW PROCEEDING FINAL DECISION, and hereby orders BEL to continue to

levy the said previously approved Tariffs, Charges and Fees in respect of the relevant electricity services it is licensed to provide.

(c) The Commission orders that effective January 31, 2023, and on the last day of each subsequent month, BEL shall file updated daily dispatch and production costings modeling for the upcoming month. Such filings shall include all spreadsheets and modelling utilized in planning the systems operations, any weather-related projections, hourly projections for CFE, and any relevant information or dataset used as an input in dispatch planning.

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

(DEAN MOLINA)

Chairman, Public Utilities Commission