

FAIR TRADING COMMISSION

DECISION

on

The Barbados Light & Power Company Limited Application to Establish a Clean Energy Transition Rider as a Cost Recovery Mechanism

Document No.: FTCUR/DECCETR/BLPC/2023-02

Date of Issue: May 31st, 2023

Table of Contents

LIST OF ABB	BREVIATIONS	3
SECTION 1	EXECUTIVE SUMMARY	4
SECTION 2	INTRODUCTION	7
2.1 Back	ground	7
SECTION 3	LEGISLATIVE FRAMEWORK	10
3.1 Legis	slative Framework	10
SECTION 4	INTERVENORS AND SUBMISSIONS	12
SECTION 5	SUMMARY OF SUBMISSIONS	16
5.1 Syno	psis of Submissions	16
SECTION 6	COMMISSION'S ANALYSIS	21
6.1 Introdu	ction	21
6.2 Grou	Inds of Application	21
SECTION 7	DETERMINATION	27
7.1 Intro	duction	27
SECTION 8	APPENDIX 1	30

LIST OF ABBREVIATIONS

ACRONYMN

ABBREVIATIONS

BLPC	Barbados Light & Power Company Limited
BNEP	Barbados National Energy Policy
CETP	Clean Energy Transition Programme
CETR	Clean Energy Transition Rider
COSR	Cost of Service Regulation
ESD	Energy Storage Device
ELPA	Electric Light and Power Act, 2013-21
FTCA 2020	Fair Trading Commission Act, CAP. 326B, as amended
GMP	Grid Modernisation Plan
GoB	Government of Barbados
IPPs	Independent Power Producers
IRRP	Integrated Resource and Resiliency Plan
MEB	Ministry of Energy and Business
MESBE	Ministry of Energy, Small Business and Entrepreneurship
PV	Photovoltaic
RB	Rate Base
RE	Renewable Energy
ROR	Rate of Return
RR	Revenue Requirement
The Commission	The Fair Trading Commission
URA 2020	Utilities Regulation Act CAP. 282, as amended
USOA	Uniform System of Accounts

SECTION 1 EXECUTIVE SUMMARY

On June 19, 2020, the Barbados Light & Power Company Limited (the "BLPC") submitted an Application which was accepted for filing, with the Fair Trading Commission ("the Commission") pursuant to Section 16 of the Utilities Regulation Act, CAP.282 (URA) of the Laws of Barbados for approval of:

- i. The establishment of a Clean Energy Transition Rider (CETR)
- ii. The CETR be the mechanism to recover the cost associated with its Clean Energy Transition Programme (CETP).
- iii. Itemised categories in the Application to form CETP.¹

The CETR mechanism is a cost tracker which when implemented will recover the costs of approved projects associated with the CETP between rate cases in a timely manner. These projects are in support of achieving the Government of Barbados (GoB) transitional goal of 100% renewable energy (RE) by 2030. The CETP at the time captures existing and future investments, namely (i) a 33 MW Medium Speed Diesel (MSD) plant, a 10 MW windfarm, 15 MW solar PV plant, the existing 5 MW Energy Storage Device (ESD), an additional 10 MW of battery storage, and grid modernisation investments.

The Barbados Renewable Energy Association (BREA) and the Ministry of Energy, Small Business and Entrepreneurship as it then was but now referred to as the Ministry of Energy and Business ("MEB"), both applied for approval to intervene in the proceedings and were granted intervenor status.

Procedural Directions were issued to the parties (the BLPC and Intervenors) participating in the matter.

¹ See paragraph 57-59 of the BLPC's Application, June 19, 2020.

BLPC submitted an Addendum to their Application dated 22 January, 2021 to the Commission to clarify the scope of recovery of the CETR mechanism and present changes to its design due to ongoing negotiations with the GoB.

On 10 February, 2023, the BLPC submitted an amendment to the aforementioned supplemental Application which further confirms the scope of cost recovery under the CETP.

The BLPC is not seeking to recover any specific cost item under the CETP at this time but is requesting approval for an alternative cost recovery mechanism.

After a comprehensive assessment of the BLPC's Application, review of submissions from Intervenors, the state of the power sector, consideration of the BLPC's rate Application, and research by the Commission on alternative cost recovery mechanisms, the Commission has determined the following with respect to this Application:

- (1) The BLPC be required to submit an individual application for the recovery of costs of each asset/project through the cost recovery mechanism. The application should meet the following minimum criteria:
 - (a) Prior notice of application at least thirty (30) business days before making an application;
 - (b) Description of tracker formula to be implemented;
 - (c) Itemized description and computation to reflect updated rate base;
 - (d) Type, updated costs and function of each asset per CETP;
 - (e) Allocation of assets in CETP to conform to the USOA;
 - (f) Cost benefit analysis for asset(s) where applicable;
 - (g) Summary and calculation of individual proposed/actual annual costs, incremental revenue requirement, rate of return, rate and bill impact per CETP;
 - (h) Summary and calculation of cumulative proposed/actual annual costs, revenue requirement, rate of return, rate and bill impact under COSR framework;

- (i) Statement of the effect on the number of rate case filings, with increases or decreases in rates;
- (j) Computation of the effect on all rate classes; and
- (k) Where appropriate the above information should be submitted in Excel Spreadsheet format with appropriate tabs.
- (2) The concept of cost recovery of prudently incurred cost through an alternative cost recovery mechanism be approved on condition that such costs on assessment of the Application are found to be unpredictable and volatile, reoccurring, and outside the BLPC's manageable costs;
- (3) The rate of return applicable to the CETR will be determined by the Commission;
- (4) The Commission will determine the reasonableness of all costs proposed for recovery and the duration period of recovery according to the principles of cost recovery; and
- (5) The BLPC will be required to submit audits in relation to any asset/project as the Commission deems necessary.

SECTION 2 INTRODUCTION

2.1 Background

The Barbados National Energy Policy 2019 - 2030 (BNEP) articulates a vision to achieve 100% renewable energy (RE) generation by 2030. This national objective targets largely the utilisation of 205 MW of centralized solar photovoltaic (PV), 105 MW of distributed solar PV, 105 MW each of onshore and offshore wind, and 200 MW of energy storage technologies.² This outlay of RE technologies under the BNEP is expected to cost BDS \$4.4 billion. As it relates to the deployment of these indigenous energy resources, eligible market participants will be required to have individual generation, storage, transmission and distribution, dispatch and sale permits as stipulated³ under the Electric Light and Power (Amendment) Act, 2019 of the Laws of Barbados. Similarly, the GoB has adopted scenario 3, an aggressive decarbonisation strategy under its 2021 Integrated Resource and Resiliency Plan (IRRP); this plan provides annual capacity allocations for RE technology investments over the short to medium term in consideration of a pure RE power utilisation.

The existing power system is predominately fossil fuel based and the transition to purely RE dependent sources will require significant capital investments for these technologies, that is, investment by Independent power producers (IPPs) as well as the BLPC. Additionally, given the inherently, intermittent and variable energy sources, particularly, for wind and solar PV technologies, their energy characteristics will need to be mitigated against through further investments as well.

According to the principles of cost recovery, any investment by the BLPC that relates to the provision of an electricity service, once prudently incurred, shall be recovered through customer rates, as is the case with the existing Cost of Service Regulatory (COSR) model.

² See page 45 of the Barbados National Energy Policy 2019-2030.

³ See section 3 of Electric Light and Power (Amendment) Act 2019.

The BLPC submitted an application dated 19 June, 2020 to the Commission for the approval of a CETR mechanism, which is intended to facilitate the timely recovery of expenditure, inclusive of a return on investment associated with its CETP. The CETR is considered a formula⁴ which when implemented will function as a flexible cost recovery mechanism⁵, designed to recoup specific costs of capital expended under the CETP; these investments are considered essential in support of the GoB's vision of a purely RE based economy by 2030.

In consideration of the scale and magnitude of renewable generation that is contemplated under the energy transition and the constraints of the existing power system, the BLPC argues that the grid must now facilitate bi-directional energy movements⁶, achieve greater operational flexibility, new functionality and resilience⁷. Amidst these unprecedented changes anticipated in the power market, the BLPC foresees that it will retain the responsibility for a safe, reliable and efficient electricity service and as such, the energy transition warrants future investments to ensure the grid functions appropriately.⁸ Collaboratively with the GoB, the BLPC developed a five-year CETP which was instituted in December 2019. This CETP consists of a 33 MW Medium Speed Diesel (MSD) plant, a 10 MW windfarm, 15 MW solar PV plant, the existing 5 MW ESD, an additional 10 MW of battery storage, and grid modernisation investments.⁹ According to the BLPC, investments under the CETP are expected to provide resiliency support in light of the energy transition. However, the CETP costs suggest that these will exceed its manageable costs. In light of this, timely rate relief is considered pertinent to the success of the energy transition to 2030, as this

⁴ See paragraph 53 of the BLPC's Application.

⁵ See paragraph 4 of the BLPC's Application

⁶ The future power grid is expected to support export of electricity from RE generators in addition to energy supply to customers seamlessly.

⁷ The Barbados Light and Power Company Limited. Notification of the Barbados Light and Power Company Limited (BLPC) to the Fair Trading Commission of its intention to establish a Clean Energy Transition Rider pursuant to Section 16 of the Utilities Regulation Act, Cap.282 of the Laws of Barbados.,:The Barbados Light and Power Company Limited. 2020, Application.

⁸ The inherent characteristics of RE generation, intermittency and variability presents operational challenges for the grid and therefore requires investments to mitigate this impact and their integration.

⁹ Clean Energy Transition Programme includes significant investments which the BLPC foresees as necessary to facilitate the energy transition to 2030. See paragraph 10, page 3 and paragraph 23, page 6 of the Application.

is expected to reduce pressure on the BLPC's rate of return, while facilitating the uptake of RE in a coordinated and safe manner. The projected rate of return without recovery of transitionary costs is below 4% for 2021 and onwards as depicted in Table 1A (Appendix 1). ¹⁰ Based on the projected capital investments inclusive of the CETP costs which is required over the five-year term 2020 - 2024, the annual amount of expenditure required is estimated at \$165 million.¹¹

Based on the BLPC's assessment of the impact of these needed investments, its rates of return will be unsustainable in the absence of rate relief.¹² On this basis, the BLPC qualifies the need for a rate relief mechanism to recovery its cost under the CETP.

As a consequence, the BLPC seeks the approval for the establishment of a CETR and that this mechanism be utilised to recover the cost associated with its CETP.¹³

 $^{^{\}rm 10}$ See paragraph 12 and 13, page 3 and 4 of the BLPC's Application.

¹¹ See paragraph 24 to 25 of the BLPC's Application.

¹² See paragraph 26-27, page 8 of the BLPC's Application.

¹³ See paragraph 57-58, page 15 of the BLPC's Application.

SECTION 3 LEGISLATIVE FRAMEWORK

3.1 Legislative Framework

Power to set rates

The Utilities Regulation Act, Chapter 282 of the Laws of Barbados (the "URA") and the Fair Trading Commission Act, Chapter 326B of the Laws Barbados, (the "FTCA") together empower the Commission to set and monitor rates for the supply and distribution of electricity in the RE sector of Barbados. More particularly, pursuant to Section 4(3) of the FTCA, the Commission has the responsibility to, inter alia:

- *(a) establish principles for arriving at rates to be charged by service providers and renewable energy producers;*
- *(b) set the maximum rates to be charged by service providers and renewable energy producers;*
- *(c) monitor the rates charged by service providers and renewable energy providers to ensure compliance;*
- (d) ...

The Commission also has these duties under Section 3(1) of the URA, which states:

"The functions of the Commission under this Act are, in relation to service providers, to

- (a) Establish principles for arriving at the rates to be charged;
- (b) Set the maximum rates to be charged;
- (c) Monitor the rates charged to ensure compliance
- (d)".

Principles and rates

Section 2 of the FTCA and Section 2 of the URA both define "principles" as the "formula, methodology or framework for determining a rate for a utility service", and stipulate that "rates" include:

- (a) every rate, fare, toll, charge, rental or other compensation of a service provider or renewable energy producer;
- *(b) a rule, practice, measurement, classification or contract of a service provider or renewable energy producer relating to a rate; and*
- (c) a schedule or tariff respecting a rate.

Procedural Directions

Procedural Directions were issued in accordance with Rule 4 of the Utilities Regulation (Procedural) Rules, 2003 as amended (the "URPR") which states:

"The Commission may issue procedural directions, which shall govern the conduct of proceedings before the Commission and shall prevail over any provision of these Rules that is inconsistent with those directions."

SECTION 4 INTERVENORS AND SUBMISSIONS

A notice of the application was issued to the public on 23 September, 2020 and interested parties were asked to submit letters of intervention to the Commission no later than 4:00 pm, Friday, October 9, 2020. Requests for late intervention was granted to the parties upon request.

Intervenor status was conferred to the two (2) parties:

- The Ministry of Energy, Small Business and Entrepreneurship (MESBE), now called the Ministry of Energy and Business (MEB); and
- The Barbados Renewable Energy Association (BREA).

Supplemental Application

On 22 January, 2021 the BLPC submitted a supplemental to its original Application to the Commission. The addendum clarifies how the incumbent utility is expected to function in the envisioned power market, and sets out three (3) draft operational licences, namely, (a) Generation and Storage, (b) Transmission and Distribution and Sales and (c) Dispatch, and how these changes will impact the original CETR Application. These new permits will replace the BLPC's existing franchise which terminates in 2028.

The proposed Transmission, Distribution and Sales licence will require the BLPC to make capital investments in accordance with an IRRP and Grid Modernisation Plan (GMP). These capital investments being made under the CETP will first require preapproval from the MEB, while the Commission pre-approves the projects' capital budget and approves the specific costs to be recovered via the CETR on an annual basis.¹⁴

Another change highlighted by the BLPC was that it will not be allowed to recover the capital cost of new RE and storage investments through the CETR as originally intended. As advised by the MEBD, the operation of these assets and revenue from

¹⁴ See paragraph 11 of the BLPC's Supplemental Application dated 22 January, 2021.

these types of projects will be subject to the applicable licences and Power Purchase Agreements (PPAs), respectively¹⁵.

Given these changes expected in the market, the BLPC proposes that the CETR be utilised to recover costs associated with 1) Generation and Resiliency Bridging investments, namely costs incurred from supporting the transitioning to 100% RE, and 2) Grid modernisation costs which relates to modifications to the Transmission and Distribution (T&D) network to facilitate the integration of RE and enhancements for operational flexibility and interoperability of the grid.

The BLPC also emphasises that its application mainly requests approval to establish a cost recovery mechanism which will seek to recover cost to be incurred under its CETP.¹⁶

Procedural directions were issued to all parties to the Application in accordance with Rule 4 of the Utility Regulation (Procedural) Rules (the "URPR"). All parties were therefore advised of the timeline stipulations and the conditions for making submissions with respect to the BLPC's Application. Submissions were required to be filed by sworn affidavits. The parties (BLPC and Intervenors) were also required to make submissions with regard to the application by 12 February, 2021.

The Commission received submissions from two (2) Intervenors. These submissions as well as interrogatories were shared with the parties.

On 12 February, 2021, the MEB submitted interrogatories by letter dated 12 February, 2021, annexing an Affidavit by Dr. Theodore Joseph Kury, MEB's principal witness¹⁷. The letter stated MEB's intention to file an application based on an assessment by its expert witness. The Commission received interrogatories from the BREA by way of

¹⁵ See paragraph 12 of the BLPC's Supplemental Application dated 22 January, 2021.

¹⁶ See paragraph 8 – 13 of the BLPC'S Supplemental Application dated 22 January, 2021.

¹⁷ The affidavit included references to the following exhibits: TJK 1 – Supplemental Submission of the BLPC January 22, 2021, TJK 2 – CETR June 19, 2020 Application, TJK 3 – Review of the BLPC's CETR (Brattle Group), TJK 4 –Affidavit of Philip Q. Hanser, and TJK 5 – Emera: Doubling Down on the Sunshine State.

letter dated 16 February, 2021. Interrogatories from both Intervenors were submitted to the BLPC on 22 February, 2021.

Responses to these interrogatories, annexed affidavit and exhibits "AC2" and "AC3", respectively, were submitted by the BLPC to the Commission on 8 March, 2021.

On 16 March, 2021 BREA requested permission from the Commission to respond to comments submitted in the BLPC's 8 March, 2021 submissions. BREA was granted leave to respond by way of affidavit by March 29, 2021.

By letter dated 19 March, 2021, and annexing documents, the MEB submitted a notice of motion to the Commission requesting that the CETR application be deferred until a rate review hearing is conducted by the Commission. The motion presupposes that the rate review will inform on a rate for the CETR as supported by MEB's expert witness submissions.

Subsequent to the closure of the BLPC's rate hearing proceedings which was held from September 21 to October 7, 2022, and October 13-14, 2022, the MEB rescinded this motion by correspondence dated 3 November, 2022. This development paved the way for the usual processing of the CETR Application by the Commission.

BLPC's Amended Supplemental Submission

By letter dated 10 February, 2023 the BLPC submitted an amendment to paragraph 12 and 13 of its supplemental submission dated 22 January, 2021. The amendment clarifies that the BLPC will be seeking to recover the costs associated with future RE and storage investments through the CETR. These investments being subsumed under the Generation and Resiliency Bridging investments.

In light of this modification, the Commission issued procedural directions to the parties by letter dated 22 March, 2023 requiring Intervenors to make submissions by 30 March, 2023 and the BLPC to respond to these submissions by 6 April, 2023.

BREA made a submission dated 29 March, 2023 in support of the amended supplemental, this being the only submission to the Commission. Notably, the BLPC did not respond to this submission.

5.1 Synopsis of Submissions

5.1.1 BREA Submissions

BREA supports the BLPC's Application for the CETR and reasons that it is an appropriate mechanism to facilitate the timely recovery of approved capital expenditure for grid upgrades and the installation of PV projects under the energy transition and beyond the 2030 target.¹⁸

The Intervenor also emphasises the urgent approval of the CETR Application for its implementation and administration. In its view rate cases can be costly, time consuming, and results in significant regulatory lag¹⁹ to the disadvantage of the BLPC and customers.

BREA refers to the conditions under which capital investments by the BLPC are to be governed and the alignment of these with the IRRP and Grid Modernisation Plan²⁰ and cautions reliance on the IRRP unless it is updated frequently or allows for investments to be prioritised based on updated data.

BREA supports the amendments to paragraphs 12 and 13 of the BLPC's Supplemental Submission to include energy storage projects and the two (2) cost categories, Generation and Resiliency Bridging investments and Grid Modernisation for recovery through the cost tracker. BREA opines that the computed values for these cost categories should be coalesced into a single value for display on customers' bills for simplicity. However, clarity is needed on whether Generation and Resiliency Bridging investments would include synchronous generators, standby generation, and energy storage for grid stability and reliability services and for Grid Modernisation to include

¹⁸ BREA, Affidavit of Stephen Worme, 16 February, 2021, paragraph 2.

¹⁹ This refers to the length of time between the utility's requests for a rate increase and the approval of new rates by the regulator.

²⁰ Grid mondernisation addresses opportunities for customer centric services, considering safety, interoperability, cybersecurity, reliability, resiliency, control and management.

T&D strengthening and shared interconnection costs for integrating RE systems.²¹ BREA intimates that the CETR calculation should not be limited to only additions of new assets to the grid but should consider the removal of fully depreciated assets since the last rate case to ensure charges are applicable to customers.²²

While a rider should not replace a rate case, these should be scheduled every 5 to 10 years to recalibrate base rates and to evaluate the efficacy of riders in operation at the time. This approach would address regulatory lag issues and minimise rate shocks to customers.²³

BREA also supports that transparent and efficient processes be developed for the approval of capital to be expended by the BLPC. While the intervenor supports the objectives of the CETR, it calls for transparent processes to monitor distinctly, assets included in rate base and those in the tracker.

5.2.2 MEB Submissions

- 5.2.2.1 MEB made eight (8) arguments against the CETR Application; these positions are outlined below:
 - (i) MEB opined that it is premature to consider the CETR Framework in isolation. This view is predicated on the basis that the BLPC has not filed a rate review since February 2010 and subsequently, material changes to the regulated rate base in terms of additions and retirements of assets occurred. Additionally, income tax changes implemented by the GoB in 2018 and 2019 resulted in tax reductions for business entities. MEBD argues that considering this adjustment and the impact of this on the current "weighted average cost of capital (WACC)", the BLPC may be collecting more for income taxes from its customers than in 2010. MEBD's expert emphasised that based the reform anticipated, that is new operational licences and responsibilities under which

²¹ BREA, Affidavit of Stephen Worme, 29 March, 2023, paragraph 12, page 4.

²² Ibid, paragraph 14, page 5.

²³ BREA, Affidavit of Stephen Worme, 29 March, 2023, paragraph 9, page 3.

the BLPC is expected to operate, there has not been a review of the value of the assets necessary to provide service, nor the operating expenses associated with these services since 2010 and as such a comprehensive review is required to address the nature of these costs and the optimality of the BLPC's capital structure²⁴.

- (ii) Dr. Kury notes that the BLPC's request relates to approval of a framework and not actual cost recovery²⁵. However, he insists that the following factors be considered with respect to the CETR's framework: (a) potential burden to the FTC and other interested parties when appraising the cost effectiveness of these investments. (b) potential distortion of investment decisions, (c) potential overrecovery on the rate of return applied to CETR investments, (d) potential double recovery of costs applied to the CETR, and (e) CETR provides no cap for costs of CETP.
- (iii) MEB's expert asserts that regulatory lag incentivises the BLPC to control its costs to the extent that only prudently incurred costs are added to the rate base. In his view, trackers reduce this incentive by softening oversight or reducing lag between when costs are incurred and recovery authorised. Accreditation of the CETR's costs will require entities to assess cost effectiveness without the reliance of regulatory lag. As a consequence, the expert foresees that this will burden interested stakeholders.
- (iv) Dr. Kury's concern is that cost tracker mechanisms tend to influence investment preferences depending on the mode of recovery applied. In his view, the CETR mechanism may still be vulnerable to an element of bias since the provision of a master plan study requires the BLPC's input and therefore, the incentive for bias in the study is possible by the need for higher benchmarking costs and processes, and thus will impose additional costs to the entity responsible for system planning.

²⁴ MEBD, Affidavit of Dr. Ted Kury, 12 February, 2021, page 3, paragraph 9.

²⁵ Ibid, page 5, paragraph 10.

- (v) MEB's expert notes the BLPC's reference to apply a WACC of 10% to the unrecovered cost in the tracker mechanism. He explained that given greater certainty of cost recovery exists through the tracker mechanism compared to that by the existing regulatory process, regulatory lag is reduced. Similarly, the risk that these investments will be precluded from the rate base is reduced owing to the pre-approval of costs in the tracker. In his view, the cost of capital applied to these investments should automatically decrease on the basis that the perception of risk generally moves in tandem with the required return.²⁶
- (vi) Dr. Kury points to paragraph 51 (g) of the original application which stipulates that the capital cost in the in CETR be transitioned to the rate base at the next rate case; this poses an additional burden on the BLPC and FTC to verify that costs to be recovered are not double counted under either regime, rate base or tracker. To avert this, a transparent regulatory accounting regime is required to classify, monitor and manage these capital costs. Insights into this requirement can only be achieved through a formal rate case.
- (vii)The CETR does not consider a true-up mechanism; this cost adjustment feature is prevalent in most expense trackers and accounts for the difference in actual expenses and revenues collected over the period, in the case where revenues exceed expense or vice-versa, resulting in over or under recovery. Such a facility is evident in the Florida Cost Adjustment referenced in the Brattle report. The absence of this characteristic imposes risk to the BLPC and its customers, and a burden on the FTC to verify sales projections.
- (viii) Dr. Kury argues that the CETR mechanism does not provide a cap on costs. Reference to paragraph 21 of the Brattle Report was made, where the expert characterised the CETR as a potential blank cheque. He dismisses the statement at paragraph 7 of the Affidavit of Philip Q. Hanser dated July 13, 2020, as untrue with regard to caps, on the basis that paragraph 51 (e) and 51 (f) of the June 19, 2020 Application states that cost in excess of the avoided fuel cost would be

²⁶ See page 5, paragraph 13 of the Affidavit of Theodore Joseph Kury, Februray 12, 2021.

deferred through a regulatory asset. In his view there is no opportunity for review or approval of the asset. As such there is no cap on the CETP costs.

SECTION 6 COMMISSION'S ANALYSIS

6.1 Introduction

In assessing the BLPC's requests for the implementation of an alternative cost recovery mechanism, the Commission assessed the following grounds of the Application, taking into account, the status of the existing power market, the timing of the said Application, submissions from Intervenors, and the Commission's own research on alternative rate approaches and relevance to the local energy context.

6.2 Grounds of Application

6.2.1 <u>CETP Proposed Investments</u>

The BLPC asserts that its existing grid infrastructure will need to be replaced or upgraded in support of the 100% RE target by 2030. These proposed investments under the approved 2019 CETP are crucial for reliability, resilience and safety of the power system. As a consequence, the BLPC reasons that without rate relief, the costs under the CETP will exceed what it can absorb under existing rates at the time and threaten its financial viability.

The CETP consists of a 33 MW Medium Speed Diesel plant, a 10 MW wind farm and 15 MW solar PV, the existing 5 MW ESD and 10 MW of battery storage, and Grid modernisation investments.

Given these suggested investments under the CETP, the BLPC proposes the implementation of a rate recovery mechanism to allow for the unlocking of capital required to finance this initiative. In the absence of a cost recovery mechanism, the BLPC posits that delays in financing would be likely.

The Commission's Analysis

The Commission accepts that concomitant investments will be required in consideration of the energy transition and for achievement of the 100% RE target by 2030. Additionally, the Commission acknowledges the need for a CETP by the

BLPC to support the energy transition. However, given the length of time which has elapsed since the filing of this Application, all of the proposed costs and assets proposed costs and assets under the CETP should be provided with current costs.

Given the magnitude of investments which may be required to mitigate the effects of integrating higher penetrations of RE to the grid, the Commission is of the view that an alternative cost recovery mechanism may be useful to facilitate timely cost recovery of capital investments under the CETP.

6.2.2 <u>Alternative Recovery</u>

In the BLPC's view, traditional ratemaking would not be responsive to the urgency of cost recovery for investments associated with the energy transition. This will require frequent rate cases since the BLPC would normally make investments and apply for recovery afterwards under the traditional COSR. The BLPC therefore sees the need for a cost recovery tracker, given the scale of proposed capital investments stated under the CETP. The BLPC claims that the tracker would ensure its financial stability and allows for investment in needed infrastructure.²⁷

The Commission's Analysis

The Commission notes that the need for alternative cost recovery approaches should be assessed based on predetermined criteria to determine whether the volume of costs is outside of the BLPC's manageable costs that are required to provide service to customers. The Commission also notes that alternative ratemaking would be applicable where the costs are inherently volatile, unpredictable, and unmanageable by the BLPC. Further, the Commission is of the view that an alternative cost recovery mechanism can be implemented in such instances but maintains that the approval of cost recovery should be scrutinised to determine, the prudency of capital investments.

²⁷ See paragraph 36 of the BLPC's Application.

6.2.3 <u>Clean Energy Transition Rider</u>

In support of the CETR mechanism, the BLPC argued that considerations such as "time, resources and other administrative costs and regulatory lag" associated with a rate application would soften the financial impact on the BLPC. The BLPC claims that the recovery of costs through the proposed CETR would result in fuel costs savings over the forecasted period 2021 – 2024 (Table 3A)²⁸.

Based on the CETP proposed capital investments (Table 4A)²⁹, the expected bill impact would be 0.01 cents/kWh. Through the implementation of the CETP, the CETR will result in reliability and resiliency hardening of the grid, facilitate fuel savings to customers, reduce rate shock, and add efficient cost recovery.

Processing under the CETR mechanism is to consist of the following activities³⁰: Capital projects under the CETP will be pre-approved by the MEB;

- Capital budgets for specific projects under the CETP will be pre-approved by the Commission; and
- Specific costs to be recovered on an annual basis via the CETR to be approved by the Commission.

The scope of cost recovery of the CETR targets two (2) asset categories including licensed utility scale RE and energy storage projects, namely³¹:

 Generation and Resiliency Bridging Investments - costs incurred as a result of or related to transitioning to 100% RE generation. These include utility scale RE and storage capital projects; and

²⁸ See Appendix 1 for this information.

²⁹ See Appendix 1 for this information.

³⁰ See paragraph 11 – 12 of Amended Supplemental Application.

³¹ See paragraph 12 - 13 of the BLPC's Amended Supplemental Application dated February 10, 2023.

 Grid Modernisation – transmission and distribution upgrades associated with safety, resilience, reliability, information technology, automation and controls and outage management.

This position to include RE and storage assets was established under the aegis of the MEB in recognition of the need for energy storage to support the integration of RE on the grid, as well as grid stability and reliability.³²

According to the BLPC, the GoB's IRRP 2021 recommends the inclusion of energy storage in the grid in order to meet energy policy objectives. There is also greater realisation of the need to store RE. The BLPC also indicated that the proposed Transmission, Distribution and Sales licence determines the conditions in respect of capital investments required.³³ However, the BLPC emphasises that it is only requesting the approval of a CETR mechanism which will facilitate the recovery of costs associated with its future CETP.³⁴

The Commission's Analysis

The Commission acknowledges that the BLPC is only seeking approval for alternative cost recovery for future CETP investments using a CETR mechanism.

The Commission has determined that the scope of cost recovery through the proposed CETR shall be limited to all prudently incurred transitionary and grid modernisation costs. The Commission shall determine the prudency of all transitionary and grid modernisation costs. It is expected that the magnitude of costs required to facilitate the integration of RE should be based on actual demand and as such, all costs should be subject to verification.

The approval process for investments under the CETP requires alignment of the CETP with the IRRP and GMP. Given this requirement, elements of the GMP which may be implemented, should be made known to the Commission at the

³² See paragraph 4-10 of the Affidavit of Adrian Carter and Exhibit AC 1 dated 10 February, 2023.

³³ See paragraph 10 of the Amended Supplemental Application dated 10 February, 2023.

³⁴ See paragraph 8 of the Amended Supplemental Application.

earliest possible time. This essential road map document is a condition of the new draft operational licences for the BLPC's business under the proposed power market structure; however, this document is currently not available³⁵. In light of this anomaly, and in consideration of the urgency of utility infrastructure needed, a carefully developed plan of works is required over the short to medium term to inform on the costs involved in support of the energy transition.

The Commission also considers that given the current state of the power market and the time which has elapsed since the submission of this Application, the CETP's costs should be updated. Given the importance of energy storage in integrating RE to the grid under the CETP, and having prior insights into the historic operation of the existing ESD, it is the view of the Commission, that on a case by case basis, a validation of need will be required to provide more visibility into the economics and proposed use of future energy storage projects. Based on the Commission's February 2023 Decision on the BLPC's Rate Application, it was determined that the cost recovery associated with the existing ESD shall continue via the FCA. The Commission requires the BLPC to provide an updated cost benefit analysis to support the use case for proposed energy storage projects under the CETP.

The Commission also notes that under the existing COSR, the recalibration of and adjustment to rates are determined on verification of all prudently incurred costs associated with providing service and in alignment with the following formula:

$$RR = E + D + T + (RB * ROR)$$
 Equation (1)

Where: Revenue Requirement (RR), Operation and Maintenance Expenses (E), Depreciation Expenses (D), Taxes (T), Rate Base (RB) ³⁶ and Rate of Return (ROR).

The approved RB consists of plant in service minus accumulated depreciation plus additions and subtractions, and the ROR is the approved return allowed on the BLPC's RB. The RB is the total value of the assets which provides the electricity

³⁵ See Condition 8. 1 (m), page 18 of the draft Dispatch Licence and condition 18, page 26 of the draft Generation and Energy Storage Licence.

³⁶ Rate base consist of all plant in service deemed "used and useful" less accumulated depreciation and other reasonable adjustments.

service. The RR represents the total cost for the BLPC to provide the electricity service and is utilised to set rates for the BLPC's customers.

The implementation of a cost tracker mechanism as an alternative to COSR for the recoupment of cost associated with the energy transition implies that approved costs to be recovered may be additional to Commission approved rates.

Moreover, the quantum of RR is carefully allocated to the respective customer classes in the form of rates. As such, the total resultant charges may be expressed as the existing rate plus the tracker costs on a per kilowatt basis. Given the aforementioned, the implementation of an alternative cost recovery mechanism presupposes that the cost tracker formula will be required for consideration and approval by the Commission. The Commission therefore expects that at minimum, the mechanics of the tracker formula shall include:

- Capital Costs of assets under CETP
- Depreciation expenses
- Operation and Maintenance expenses
- Asset's estimated useful life
- Commission approved Rate of return
- Any other cost component deemed applicable by the Commission in its sole discretion.

Additionally, with the implementation of a cost tracker mechanism, its actualization may result in a difference in proposed and actual costs, and as such will require reconciliation. To this end, the Commission may require the BLPC to submit audits as the Commission deems necessary.

SECTION 7 DETERMINATION

7.1 Introduction

The Commission notes that the adoption of alternative cost recovery modalities may be appropriate to recover prudently incurred costs with respect to capital investments needed to support the energy transition, taking into account the volume of investments which are expected to actualize the 100% RE target.

The Commission also acknowledges the submissions made by Intervenors and the issues which were raised in consideration of the CETR mechanism. Having had the benefit of the BLPC's Rate Hearing proceedings since the submission of this substantive application, and the Supplemental submissions by the BLPC, the Commission is of the view that it would be appropriate for the BLPC to update projected costs of the CETP and CETR costs for further reviews by the Commission. Additionally, the Commission considers the time which has elapsed since the submission of this Application, changes in legislation, and reform of the power sector and now determines the following treatment be applied in light of this application:

- (1) The BLPC be required to submit an individual application for the recovery of costs of each asset/project through the cost recovery mechanism. The application should meet the following minimum criteria:
 - (a) Prior notice of application at least thirty (30) business days before making an application;
 - (b) Description of tracker formula to be implemented;
 - (c) Itemized description and computation to reflect updated rate base;
 - (d) Type, updated costs and function of each asset per CETP;
 - (e) Allocation of assets in CETP to conform to the USOA;
 - (f) Cost benefit analysis for asset(s) where applicable;
 - (g) Summary and calculation of individual proposed/actual annual costs, incremental revenue requirement, rate of return, rate and bill impact per CETP;

- (h) Summary and calculation of cumulative proposed/actual annual costs, revenue requirement , rate of return, rate and bill impact under COSR framework;
- (i) Statement of the effect on the number of rate case filings, with increases or decreases in rates;
- (j) Computation of the effect on all rate classes; and
- (k) Where appropriate the above information should be submitted in Excel Spreadsheet format with appropriate tabs.
- (2) The concept of cost recovery of prudently incurred cost through an alternative cost recovery mechanism be approved on condition that such costs on assessment of the Application are found to be unpredictable and volatile, reoccurring, and outside the BLPC's manageable costs.
- (3) The rate of return applicable to the CETR mechanism will be determined by the Commission;
- (4) The Commission will determine the reasonableness of all costs proposed for recovery and the duration period of recovery according to the principles of cost recovery; and
- (5) The BLPC will be required to submit audits in relation to any asset/project as the Commission deems necessary.

Dated this 31st day of May, 2023

Original signed by

.....

Donley Carrington Hearing Chairman

Original signed by

Original signed by

John Griffith Commissioner Ruan Martinez Commissioner

Original signed by

Ankie Scott-Joseph

Commissioner

Original signed by

Commissioner

SECTION 8 APPENDIX 1

Following are the tables from the BLPC assessment of the CETR performance from 2020 -2024 based on the capital investment items of the CETP which were identified to support the energy transition:

	2019	2020	2021	2022	2023	2024
New Capital Expenditure	\$102.3	\$235.2	\$137.0	\$175.4	\$151.3	\$189.6
Rate Base	\$655.5	\$898.0	\$989.6	\$1087.3	\$1148.0	\$1225.0
Operating Income	\$53.3	\$48.7	\$38.3	\$22.2	\$7.7	\$11.4
Rate of Return	8.13%	5.42%	3.81%	1.99%	-0.62%	-0.89%
Revenue Requirement Deficit	(\$12.3)	(\$41.1)	(\$61.3)	(\$87.4)	(\$122.3)	(\$134.1)

Table 1A: CETR Projected Revenue Requirement

 Table 3A - Projected Revenue Shortfall (\$ Millions)

	2020	2021	2022	2023	2024
CETP Capital Spending (\$M)	\$138.0	\$27.9	\$25.2	\$41.0	\$44.0
Revenue Requirement (\$M)	-	\$23.3	\$44.8	\$48.7	\$63.4
CETR Recovery (\$/kWh)	-	\$0.032	\$0.046	\$0.050	\$0.065
Rate of Return with CETR	5.42%	6.11%	6.01%	3.50%	4.15%

Table 4A: CETP Potential Fuel S	Savings and Bill Impacts
---------------------------------	--------------------------

	2020	2021	2022	2023	2024			
Low Fuel Price Scenario								
Fuel Cost Savings (\$M)	-	\$26.0	\$46.9	\$35.6	\$40.9			
Fuel Cost Savings (\$/kWh)	-	\$0.03	\$0.05	\$0.04	\$0.04			
Net Bill Impact (\$/kWh)	-	\$0.005	(\$0.002)	\$0.014	\$0.024			
Expected Fuel Price Scenario								
Fuel Cost Savings (\$M)	-	\$30.9	\$60.9	\$58.4	\$68.3			
Fuel Cost Savings (\$/kWh)	-	\$0.032	\$0.063	\$0.060	\$0.069			
Net Bill Impact (\$/kWh)	-	(\$0.000)	(\$0.017)	(\$0.009)	(\$0.004)			

	2020	2021	2022	2023	2024			
High Fuel Price Scenario								
Fuel Cost Savings (\$M)	-	\$35.7	\$74.7	\$81.0	\$95.6			
Fuel Cost Savings (\$/kWh)	-	\$0.04	\$0.08	\$0.08	\$0.10			
Net Bill Impact (\$/kWh)	-	(\$0.005)	(\$0.031)	(\$0.032)	(\$0.032)			