



04 April 2025

Mr. Dean Molina
Chairman
Public Utilities Commission
2nd Floor, Marina Towers
New Town Barracks
Belize City, Belize

Dear Chairman Molina,

Re: 2025 Annual Review Proceedings Submission

Pursuant to the provisions of the Electricity (Tariffs, Fees and Charges) Byelaws, S.I. 145 of 2005 as amended by S.I. 116 of 2009, Belize Electricity Limited (BEL), hereby makes its submission for the 2025 Annual Review Proceeding to the Public Utilities Commission (PUC).

Summarily, the Company is requesting an increase in the average price of electricity, by way of increases to the associated tariffs, from \$0.40 per kWh to a *minimum* of \$0.43 per kWh with effect from January 1, 2026, through to the remainder of the Full Tariff Period ending June 30, 2028. BEL proposes that this rate increase will be supported by the full implementation of the PUC-approved *Demand Charge Rate* comprised of demand charges and time-of-use pricing to ensure cost recovery and fair pricing mechanisms for distributed generation (DG) participants and other Customers desirous of opting into that rate structure. The proposed price increase is needed to abate the rising cost of energy imports, inflationary pressures on operating and maintenance expenses, and the need for investments primarily to simultaneously harden and modernize the grid and to connect new utility-scale renewable energy generation and battery energy storage solutions.

BEL's application is supported by the full documentation of its assumptions and the supplemental data requested by the PUC. We look forward to the PUC's review and we are available to provide any additional information or clarifications required to facilitate an informed decision in the best interest of all stakeholders.

Sincerely,
Belize Electricity Limited

Leon Westby
Manager, Strategy & Business Development
Regulatory Affairs Liaison

2025 Annual Rate Review

Rate Case Submission to the Public
Utilities Commission for ARP 2024-2025

04 April 2025

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Approvals Sought, Overview of the Application and Proposed Process

1. Approvals Sought, Overview of the Application and Proposed Process

1.1 Introduction

Belize Electricity Limited (BEL) submits this Annual Review Proceeding (ARP) filing in accordance with the regulatory framework established under the **Electricity Act, Chapter 221 of the Laws of Belize**, and the Electricity (Tariffs, Fees, and Charges) Byelaws, S.I. 145 of 2005, as amended by S.I. 116 of 2009. This submission to the Public Utilities Commission (PUC) is an integral part of the ongoing regulated Tariff Review Proceedings, which govern the determination of electricity rates, charges, and fees to ensure the long-term financial viability and operational sustainability of the electricity sector in Belize.

As Belize's electricity market continues to evolve in response to regulatory reforms, economic challenges, and technological advancements, BEL remains committed to providing safe, reliable, and sustainable energy solutions throughout Belize. BEL's rate case proposal for the 2025 ARP reflects this commitment by ensuring that tariffs remain cost-reflective, transparent, and aligned with the principles of sustainability and efficiency, while supporting Belize's long-term energy goals. This submission is framed within the broader context of BEL's strategic transformation, recognizing the rapidly shifting industry dynamics that require proactive adaptation, innovation, and modernization to secure Belize's energy future as envisioned by the various stakeholders.

The Electricity Act, along with its subsidiary legislation, grants the PUC the authority to regulate the energy sector, including the setting of tariffs, service charges, and performance and quality-of-service standards to ensure reliability and affordability for consumers, while aligning with national energy objectives to safeguard consumer interests. Statutory Instrument No. 145 of 2005, as amended, prescribes the methodology by which electricity tariffs, rates, charges, and fees for both existing and new services are determined. It also establishes the mechanisms, formulas, and procedural frameworks that govern how these costs are calculated and adjusted to ensure a stable and predictable tariff structure.

Under this regulatory framework, BEL undergoes a Full Tariff Review Proceeding (FTRP) every four years, in addition to Annual Tariff Review Proceedings (ARPs). These

proceedings determine the Mean Electricity Rate (MER), tariffs, and fees, based on BEL's Revenue Requirement, also known as the **Tariff Basket Revenue (TBR)**. The TBR is comprised of three fundamental cost components:

- 1. Cost of Power (COP)** – Represents the capacity and variable generation costs, which are based on the most recent forecasts and market assumptions at the time of review. Given the volatility of global and regional energy markets and Belize's increasing integration of renewable resources into the energy supply mix, this component remains a key driver of tariff adjustments.
- 2. Value Added of Delivery (VAD)** – Covers BEL's operating expenses, including taxes, regulatory fees, and depreciation on capital investments. This component is also designed to ensure a reasonable return on investment, as reflected in the Regulated Asset Value (RAV), which is necessary for continued system reliability and the expansion and modernization of BEL's electricity infrastructure.
- 3. Rate Adjustments and Revenue Reconciliation** – Adjustments are made to account for any variances between the PUC-approved Tariff Basket Revenue and the actual Tariff Basket Revenue (collected revenue, as per audited financial statements) during the review period. These adjustments help ensure cost recovery and financial stability, while minimizing volatility in consumer rates.

BEL's ARP filing comes at a critical time, as the country navigates a transforming energy sector marked by evolving customer expectations, technological disruption, and regulatory shifts. The submission represents a commitment to customer-centric service excellence, operational excellence, and innovation, ensuring the Company is able to remain adaptive, resilient, and positioned to support and lead the transition required for a modern energy landscape in alignment with national and global energy trends.

1.2 Corporate Status

BEL is duly authorized to generate, transmit, and supply electricity to consumers throughout the country of Belize. The Company is a public liability company incorporated and domiciled in Belize. The Government of Belize (GOB) holds 32.58% of the issued and outstanding shares of the Company, and the Social Security Board (SSB) holds 31.27%, resulting in a total public sector ownership interest of 63.85%. Fortis Cayman Inc. holds 33.30% interest, and over 1,500 small shareholders own the remaining 2.85% of ordinary shares.

1.3 Market Role and Grid Operations

BEL, as mandated by law, holds the exclusive role of Single Buyer within the national electricity market. With ownership of the national electricity grid, BEL is the sole entity authorized to procure electricity in bulk and distribute to consumers. The Company, therefore, plays a critical role in Belize's energy market, ensuring energy security, reliability, and sustainability for over 110,000 customer accounts. The extensive grid infrastructure spans approximately 4,000 miles, which interconnects all major municipalities across Belize.

BEL operates in a rapidly evolving energy landscape, where regulatory reforms, technological innovation, and shifting consumer preferences are redefining the electricity sector. The 2024 **Licensing and Consent Regulations** and the Government's 2023 National Energy Policy signal an industry transition from a single-buyer model to a more competitive market structure, introducing new market participants, the possibility of active and contributing distributed generation actors, and enabling alternative retail and distribution models. These changes will reshape BEL's market position and demand a proactive, strategic response to sustain grid viability, operational efficiency, and essential service to our broad customer-base.

The grid is supplied by various Independent Power Producers (IPP) utilizing a diversified mix of hydroelectric, biomass, solar, and fossil fuel sources, reinforced by a cross-border interconnection with Mexico that enhances grid stability and helps to manage energy supply costs. While BEL does not currently compete in electricity generation, it operates three diesel generation plants to support system reliability and energy security:

- The Westlake Gas Turbine (30MW) at the Westlake substation along the George Price Highway serving as a rapid-response standby unit for energy security, grid stability, and emergency backup.
- An off-grid power station consisting of multiple diesel-powered generating units supplying electricity to the island of Caye Caulker.
- A 21MW mobile gas turbine commissioned in September 2024 and currently stationed in Ambergris Caye to support the burgeoning demand for electricity of the island and providing additional support to the national grid during peak demand periods.

BEL supplied a national peak demand of 129MW (as of May 2024) and approximately 705,284 MWh of electricity in 2024. The Company remains the primary supplier of electricity in Belize, ensuring universal service coverage and reliability.

However, the growth of distributed generation technologies—such as rooftop solar and microgrids—poses a potential long-term shift in the electricity market structure. As decentralized energy solutions expand, BEL’s market share and role as the primary electricity supplier will evolve, requiring adaptation to changing industry dynamics. BEL has been adapting its business model, operational structure, and suite of services to remain the preferred energy solutions provider in an increasingly decentralized market.

1.4 Approvals Sought

This filing seeks PUC approval for critical regulatory adjustments necessary to achieve full cost recovery through fair and cost-reflective rates and to support long-term financial stability while ensuring the Company can provide safe, reliable, and sustainable energy solutions through high quality services to its Customers. The requested approvals directly align with the evolving energy demands of consumers and BEL’s capital investment strategy and long-term grid modernization objectives, ensuring that Belize’s electricity sector remains resilient.

While the filing focuses on the 2025 ARP, it also includes projections through 2028 to reflect a long-term outlook—emphasizing that electricity prices should not be based on a single year in isolation but rather viewed across a multi-year horizon to promote rate stability, financial predictability, and investment confidence, aligning with global regulatory best practices.

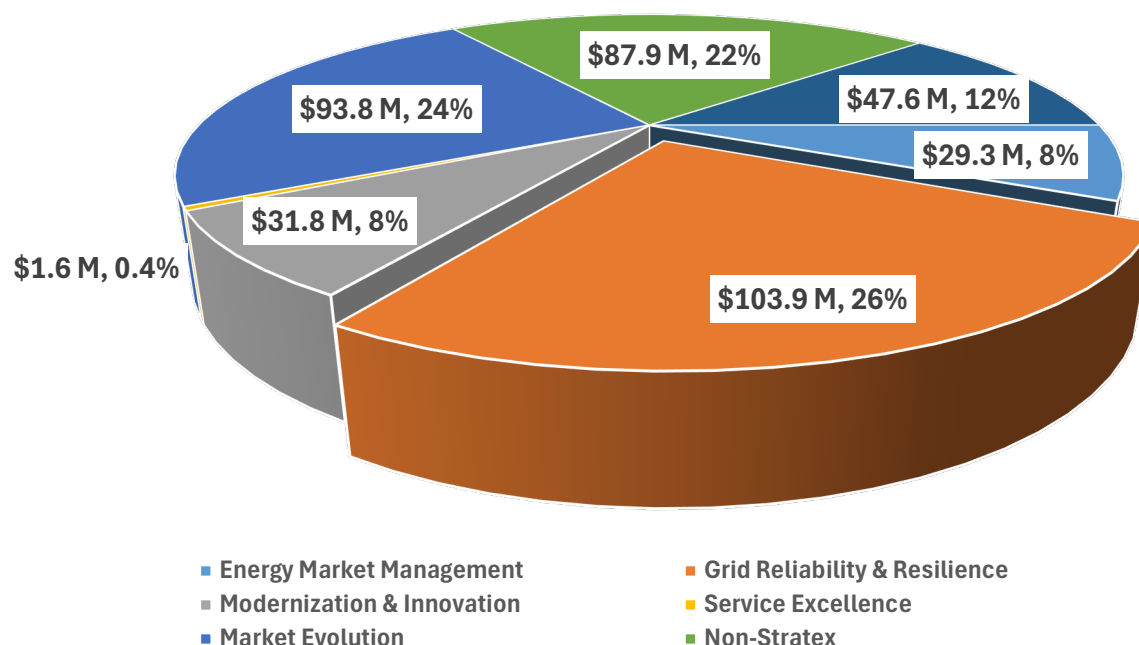
1.4.1 Approval of \$395 MN in Capital Expenditures

BEL seeks the PUC’s approval for a \$395 MN capital investment plan to modernize the electricity grid, enhance system reliability, and expand infrastructure to meet growing energy demands.

The proposed capital expenditures are focused on:

- **Grid Modernization & Smart Technologies** – Deploying Advanced Metering Infrastructure (AMI), automated grid management systems, and analytical tools to optimize system performance and efficiency.
- **Infrastructure resilience and Capacity Expansion** – Reinforcing the grid to withstand climate-related risks; increasing distributed generation integration; and upgrading transmission and distribution networks.
- **Energy Transition and Renewable Integrations** – Enhancing grid flexibility, storage capacity, and interconnection capabilities to support higher penetration of renewables and decarbonization initiatives.

**Figure 1: Capital Investments by Strategic Pillars
2025-2029**



The proposed capital expenditures will ensure that BEL maintains a future-ready and sustainable grid, capable of integrating new technologies and supporting national energy security and economic growth.

1.4.2 Approval of \$46 MN in OPEX (2025)

BEL continues to face rising operational costs as it works to maintain a modern, resilient and fortified energy grid. During the 2020-2024 FTP, the approved OPEX was \$133M (\$33M annually), but actual expenses exceeded this by \$2M to \$4M per year, highlighting the growing financial demands of system maintenance and service quality enhancements. For the 2024-2028 period, BEL proposed \$194M (\$48.5M annually on average) to support system expansion, reliability, and modernization. However, the approved \$155M (\$38.8M annually) from the 2024-2028 FTRP final decision leaves a \$10M annual shortfall, constraining the Company's ability to meet increasing demand and sustain critical system improvements.

BEL requests an increase in approved OPEX to at least \$46M for 2025 ARP to ensure continued service quality, reliability, efficiency, and long-term financial stability. This includes programs and initiatives addressing rising grid maintenance costs driven by aging infrastructure and increasing service demand, cybersecurity and IT

investments to protect Belize’s power infrastructure from emerging digital threats, and workforce technical upskilling to ensure operational efficiency.

BEL reiterates its position that the approved OPEX for the 2024-2028 FTP is not sufficient to cover its operational costs and requests that, as a minimum, the variance between BEL’s requested OPEX and the approved OPEX will be registered in the Regulatory Account Balance, ensuring future cost recovery.

1.4.3 Approval of \$65.6 MN in Corrections for 2023 ATP

BEL seeks the PUC’s approval for a \$65.6 million correction to the 2023 Annual Tariff Proceeding (ATP), ensuring the approved revenue requirement reflects the actual cost of power (COP). The 2023 PUC forecast was approximately \$42.95 million below actual COP, requiring an updated revenue requirement. The table below sets out the elements of the forecasted revenue requirement as well as revenue collections as recorded by the PUC in its Final Decision on FTRP 2024 compared to the actuals for the period as per BEL’s audited financial statements.

Table 1: Regulated Account Balance – PUC vs BEL

	PUC Forecast	BEL Request
	2023 2024	2023 2024
VAD Components		
OPEX	34,008,830	34,008,830
Return	36,713,174	36,803,931
Depreciation	19,889,109	19,948,374
Net annual Corrections - FTRP	8,842,163	8,842,163
ARP 2021	(338,486)	(338,486)
ARP 2022	(5,315,848)	(5,315,848)
ARP 2023	13,498,270	13,498,270
Taxes/License fees	8,210,391	9,437,680
Sub-total (VAD)	115,507,603	116,884,914
Ref Cost of Power	187,258,845	230,207,308
Less: Other Income	4,206,765	3,903,845
TBR	298,559,683	343,188,378
Revenues Collected	274,795,861	277,625,797
General Correction	\$ 23,763,822	65,562,580

BEL urges the PUC to revisit its forecasting methodologies, ensuring that future revenue projections align with actual COP outcomes to prevent revenue shortfalls that can destabilize operations and delay critical infrastructure investments.

1.4.4 Establishment of Wholesale Generation Subsidiary

BEL has established a wholesale generation subsidiary, **Synergy Power Belize**, to facilitate cost-effective generation expansion and improved energy market participation. This subsidiary will hold and operate generation assets owned by BEL, subject to PUC approval for final structuring, asset transfers, and market participation.

BEL's strategic vision for the subsidiary includes:

- Providing generation capacity and wholesale electricity to BEL under competitive agreements, ensuring cost-effective power procurement.
- Positioning BEL to participate in the wholesale electricity market, supporting a reliable, competitive and diversified energy sector.
- Exploring capital-raising opportunities, either through a full divestment or joint venture partnerships, to finance and accelerate generation expansion projects.

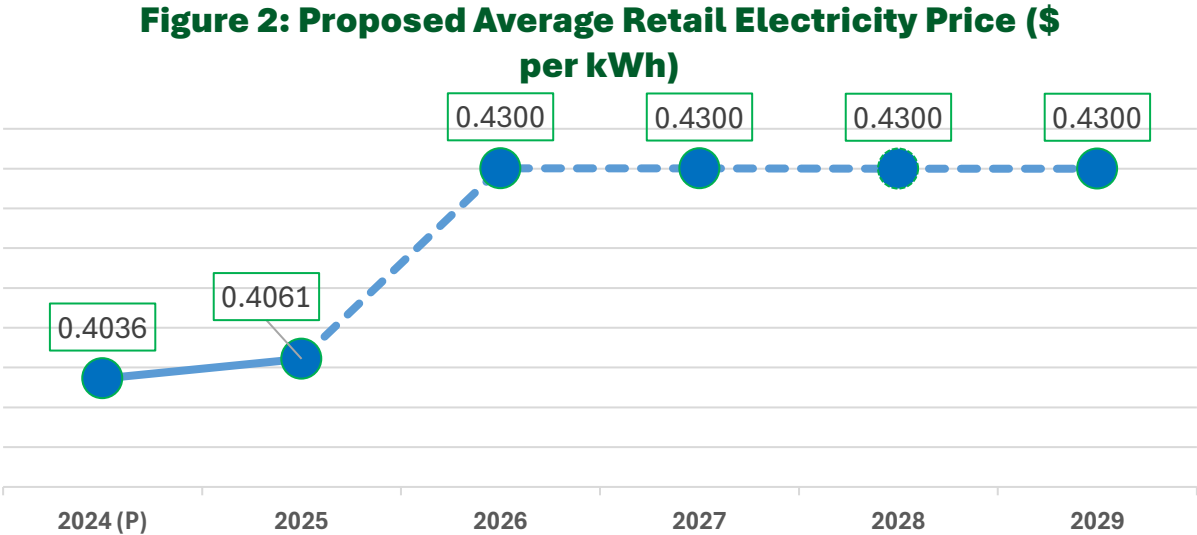
BEL seeks the PUC's approval for the final asset transfer and operational framework of Synergy Power Belize in alignment with national energy policy objectives and regulatory market structures.

1.4.5 Cost Reflective Rates

The Mean Electricity Rate, or average cost of electricity per kWh of energy sold, is forecasted to increase to \$0.45 per kWh for this FTP reflecting increasing cost of power and grid modernization costs (see Tariff Basket Revenue in Schedule 5). **Consequently, BEL is seeking, as a minimum, an increase in the average pre-tax retail price for electricity from 40 cents per kWh to 43 cents per kWh by increasing the effective tariffs as proposed in Schedule 6 of this submission. The price increase is to take effect from January 1, 2026.**

While the proposed rate increase to 43 cents remains below the projected average cost of electricity (projected mean electricity rate), this minimum increase is critical to bolstering BEL's financial capacity and allowing for the recovery of extra-ordinary cost of power arising in the first half of 2024 and likely to repeat in the first half of 2025. However, this price increase is itself not sufficient to enable BEL to secure reliable power supply in the face of inordinately high demand peaks induced by the continuing heatwaves and limited in-country generation capacity. BEL therefore requests, in tandem, the full implementation of time-of-use (TOU) pricing on a day-head or two-

days ahead basis for industrial consumers as well as large residential and commercial consumers which would enable these high-volume consumers to adjust their use patterns to more timely price signals. Furthermore, this advanced version of TOU will enable these Large Customers with greater willingness and capacity to pay to access the higher-priced electricity during peak periods when the cost of electricity is above that which is provided for in the average retail price at 40 or 43 cents per kWh.



Accompanying this submission is BEL’s preliminary data analysis for TOU rate structure which includes hourly pricing. The Company is requesting a collaborative approach with the PUC to review and develop an appropriate TOU structure for hourly pricing and criteria for Customer participation in such a rate scheme to be implemented as soon as is reasonably possible and no later than the start of ARP 2026.

Given the rising cost of energy imports, inflationary pressures on O&M expenses, and the need for grid modernization, this approach is necessary to ensure revenue sufficiency to cover the full cost of service, reduce dependency on regulatory deferrals, ensuring financial sustainability, mitigating cash flow challenges that arise in delays in cost recovery, and to enable future investments. Without these adjustments, BEL’s ability to sustain system reliability, expand capacity, and integrate advanced energy solutions will be significantly constrained.

1.4.6 Cost-Reflective Tariff Structure

BEL is advancing critical reforms to the electricity tariff structure to ensure that rates accurately reflect the actual cost of generation, transmission, and distribution. The

existing volumetric pricing model is no longer sufficient to sustain financial stability amid evolving consumption patterns, increasing grid demands, and the expansion of distributed energy resources (DERs.). Without these necessary adjustments, the Company's ability to maintain a resilient, modernized grid will be compromised.

A fundamental action is the continuation and refinement of the Demand Charge Rate within the regulatory sandbox model. This is necessary to ensure that traditional grid-reliant consumers and DER prosumers contribute equitably to infrastructure costs. This includes:

- *Revised Demand-Based Pricing* (capacity charge) to better reflect and recover fixed infrastructure costs, ensuring that customers who rely on the grid pay their fair contribution to keep the grid available and that the burden of the costs caused by them is not passed on to traditional consumers.
- *Revised Time-of-use Tariffs* to reflect and recover variable energy costs, encouraging optimized energy usage and system efficiency.

BEL also urges the PUC to consider Real-Time TOU pricing—a forward looking approach that provides Customers with price signals days in advance. This would help Customers to proactively plan and adjust energy use based on actual system costs and constraints, promoting efficiency and lowering energy costs, while ensuring timely cost of power recovery by BEL.

Without these structural updates, Belize's electricity market will face increasing financial risks and operational inefficiencies, limiting the sector's ability to meet growing demand and integrate emerging technologies and solutions. These adjustments are, therefore, crucial for long-term industry sustainability.

1.4.7 Regulatory Account Balance Management & Cost Recovery

BEL seeks the PUC's approval for the structured management of variances between actual costs incurred and revenues collected through electricity rates. These variances accumulate in the Regulatory Account Balance (RAB) and must be systematically recovered in future periods to ensure financial stability while protecting Customers from abrupt rate increases.

Historically, these differences arise due to:

- Unanticipated changes in power purchase costs from external suppliers such as CFE and fuel market volatility.

- Delays in cost pass-through mechanisms, requiring deferred recovery strategies to smooth out electricity rate impacts and prevent immediate Customer bill shocks.

To address this, BEL proposes a strategic cost recovery approach that ensures gradual and predictable financial adjustments while preventing customer price volatility. Under this framework:

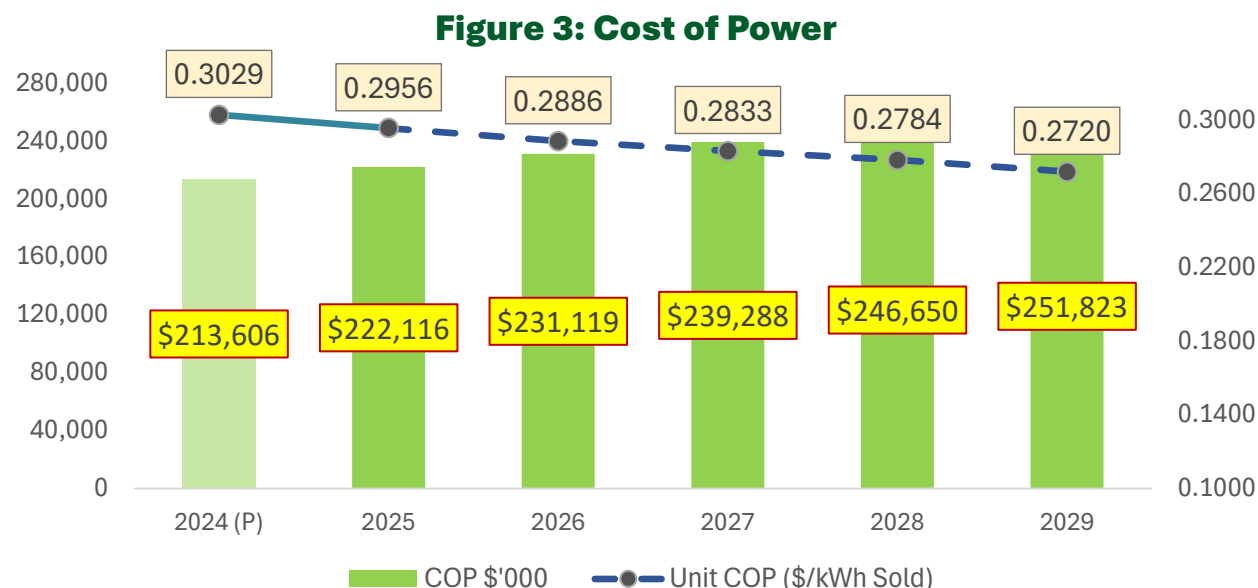
- Recovery of the current outstanding RAB balance will be phased-in annually, starting with the initial rate adjustment in 2026 (to at least \$0.43) as proposed above.
- Thereafter, the PUC may consider annual incremental adjustments of at least 1 cent per kWh starting in 2027 to accelerate recovery unless the other tariff mechanisms being proposed above or lower-than-expected COP outcomes allow for recovery during the current FTP.

1.5 Revenue Requirement for 2025

The proposed revenue requirement for 2024-2025 is \$300.132 MN, representing a decrease of \$43.05 MN over the previous period. Key components of the Revenue Requirement include:

Cost of Power (COP)

COP is projected to rise by an average of 3.35% per year, driven by increasing generation requirements, which are expected to grow 5.44% annually (See Figure 3). Total COP is projected increase to \$222.1 MN in 2025, and reach \$251.8 MN by 2029.

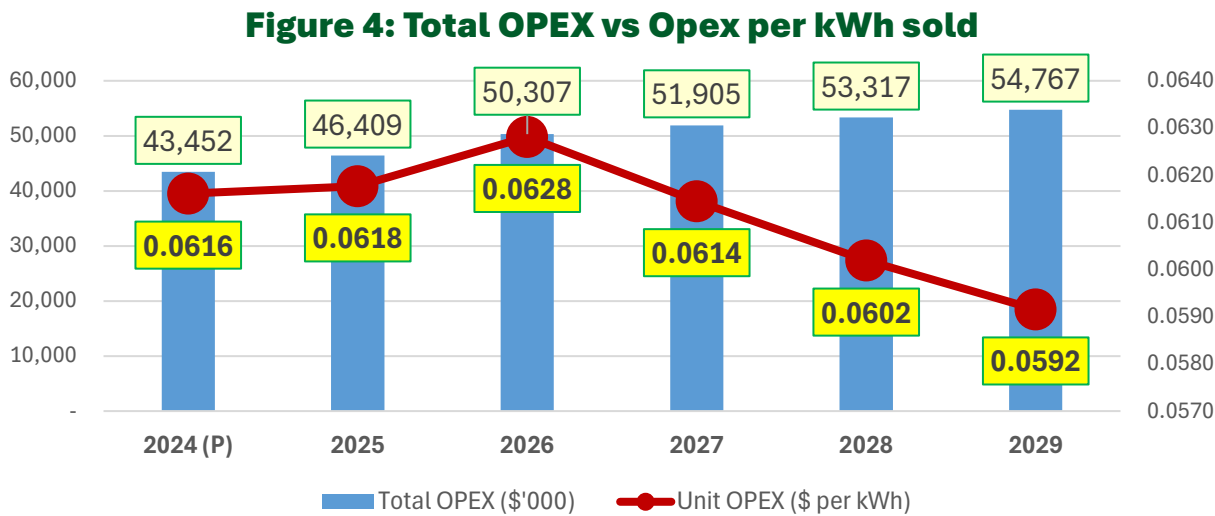


While unit COP (\$/kWh sold) is expected to decline slightly from \$0.3029 in 2024 to \$0.2720 in 2029, the absolute cost increase reflects growing electricity demand, particularly from rising cooling loads, tourism expansion, and industrial growth. Climate change models¹ predict hotter temperatures in Belize, increasing demand for air conditioning and refrigeration across residential, commercial, and industrial sectors. Additionally, tourism—one of Belize's largest economic drivers—is projected to continue its upward trend, following a 25% increase in overnight arrivals in 2023 and an 11% growth in 2024. This will place further strain on electricity demand, particularly from hotels, resorts, and supporting industries.

1.5.1 Operational Expenditure (OPEX)

Operational expenditure is projected to increase by 4.74% per annum over the plan period, with 46% of 2025’s budget allocated to payroll expenses. This reflects inflationary pressures, workforce retention strategies, and necessary operational investments. However, despite these increases, unit OPEX per kWh sold is expected to decline from \$0.0616 in 2024 to \$0.0592 by 2029, demonstrating planned efficiency gains and cost management improvements.

A highly skilled workforce remains critical to BEL’s efficient operations, yet intensifying competition from local and regional markets presents recruitment and retention challenges. The Caribbean utility sector is experiencing a talent drain, with skilled professionals increasingly recruited by other regional utilities offering more competitive compensation.



¹ The World Bank's Climate Change Knowledge Portal reports that mean annual temperatures in Belize have increased by 0.45°C since 1960, with projections indicating a further rise of 2.7 to 3.4°C by 2100. This warming trend is expected to escalate the need for cooling solutions in residential, commercial, and industrial settings.

To mitigate these challenges, BEL is implementing a comprehensive workforce plan, incorporating targeted training programs, career progression opportunities, market-aligned job evaluation and remuneration reviews, and non-monetary incentives to strengthen retention and long-term capacity. In parallel, investments in technology-driven process improvements, digitalization, and enhanced grid management systems will drive further cost efficiencies, ensuring sustainable operational performance while maintaining competitive electricity rates.

1.5.2 Regulatory Asset Value

BEL has planned \$395MN in capital expenditures (2025-2029) for transmission and distribution infrastructure improvements, grid resilience improvements to withstand extreme weather conditions and environmental stressors, and renewable energy integration, deployment of advanced smart grid technologies to modernize the electricity network, *inter alia*.

1.6 Service Coverage

1.6.1 Service Delivery Index Overview

BEL continuously monitors key service quality indicators (*i.e.*, *Service Delivery Index*) to ensure efficient service delivery, customer satisfaction, and drive operational excellence. The 2024 performance metrics reflect strong results in several areas, while also identifying opportunities for improvement in service order management and infrastructure-related response times.

Table 1: Service Delivery Metrics

Metrics	2016	2017	2018	2019	2020	2021	2022	2023	2024
Avg. Days to Complete Customer Initiated Requests	2.9	3.0	2.8	2.8	4.8	4.6	2.5	3.6	2.5
Avg. Days to Complete New Service Connections	1.1	3.1	2.4	2.2	4.2	2.9	1.9	2.3	2.3
Avg. Days to Complete New Service Connections (LV works)	N/a	N/a	46.0	35.6	23.6	25.6	19.6	15.6	23.6

Avg. Days to Complete Streetlight Repairs	6.8	26.4	9.9	9.4	11.2	18.1	7.8	7.5	5.7
Avg. Customer Call Wait Time (Seconds)	27.8	27.1	11.9	16.9	45.2	26.2	135.7	81.7	39.1
% of Abandoned Customer Calls	12.9%	10.4%	4.8%	5.0%	19.4%	3.5%	31.0%	36.9%	15%
No. of Unbilled Accounts	11	8	4	2	3	2	4	9	1.75
Avg. Days from Meter Reading to Bill Delivery	6.9	8.5	8.9	6.8	3.8	3.0	3.0	3.0	3
Avg. Number of Monthly Inaccurate Billing	83	33	16	15	25	22	22	18	5
Avg. Days to Process customer claims	26.9	25.0	6.6	7.7	14.6	11.6	15.1	44.5	23.2
No. of customer complaints/1000 customers	7	6	6	6	6	5	5	4	4
Avg. Trouble Call Response Time (minutes)	N/a	N/a	63.1	74.6	79.9	70.4	65.3	66.2	N/A

BEL maintained low complaint rates and high service reliability throughout 2024, reinforcing its commitment to efficiency and Customer satisfaction. Some service efficiency improvements in 2024 include:

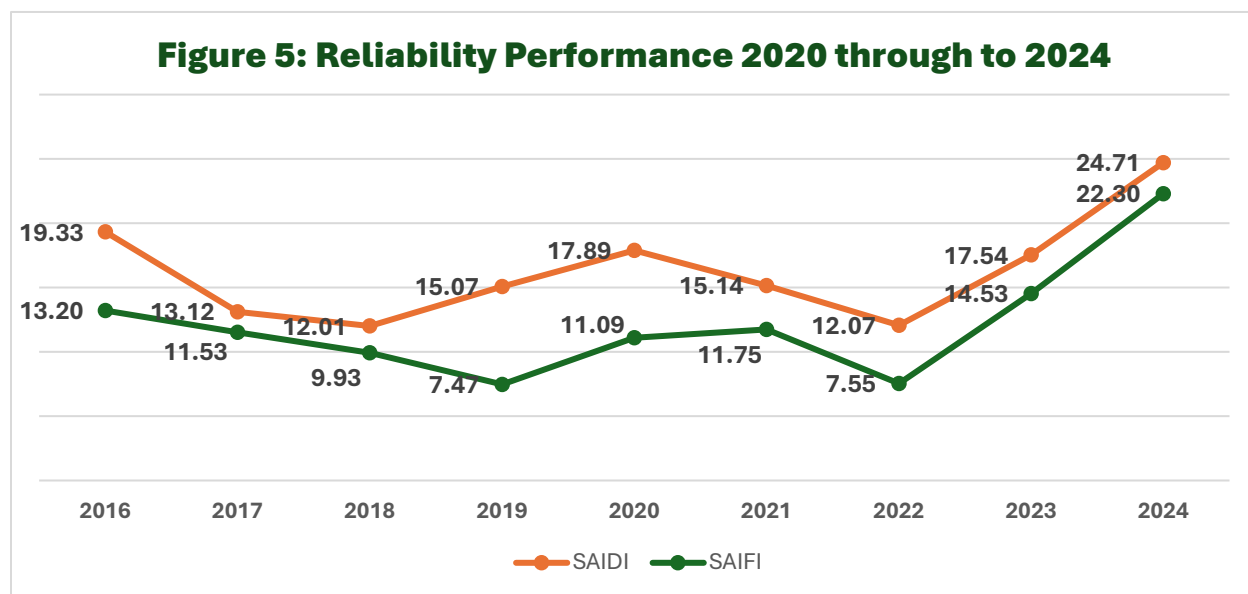
- *Customer request processing:* 2.5 days (down from 3.1 days in 2023)
- *New Service Connections:* 2.3 days, maintaining best-in-class efficiency
- *Streetlight repairs:* 5.7 days, the fastest performance in a decade.
- *Billing Accuracy:* Record low of 5 errors per month
- *Call Centre Performance:* Wait times decreased and abandoned call rates reduced to 15%
- *Customer Claim Processing:* Improved to 23.2 days but remains an area for further enhancement.

Despite these gains, time to complete new service connections requiring secondary line upgrades rose to 23.6 days.

1.6.2 Reliability

BEL's reliability performance from 2020 through 2024 reflects both ongoing operational challenges and unprecedented external factors that impacted system performance. While previous efforts under the 2020 FTP focused on stabilizing and improving reliability compared to the 2016 FTP, the 2024 period presented extraordinary conditions that significantly affected service continuity.

A key driver of the increase in SAIDI and SAIFI indices in 2024 (See Figure 5) was the impact of severe heat waves, which intensified demand for cooling, placing exceptional stress on generation capacity and leading to periodic generation shortfalls. The extreme heat also contributed to infrastructure stress, equipment overheating, and accelerated wear on network components, compounding outage frequency and duration. Additionally, elevated dust levels from prolonged dry conditions further impaired insulators, transformers, and transmission lines, leading to higher-than-usual maintenance interventions.



Key mitigation measures already underway include:

- Replacement of porcelain insulators with weather-resistant polymer insulators to reduce dust-induced faults.
- Strategic procurement of additional renewable generation capacity via an RFP issued in collaboration with the Government of Belize and the PUC.
- Integration of 20 MW of Battery Energy Storage Solutions (BESS) to buffer the generation shortfalls and improve grid reliability.

Vegetation encroachment also remains a challenge, with persistent issues of overgrown trees and debris encroaching on power lines, exacerbated by contractor shortages and delays in clearing activities. To address this, the 2024 FTP will focus on implementing proactive vegetation management strategies, including:

- Advanced drone-based line inspections for early identification of risk areas.
- GIS mapping for precise analysis of vegetation encroachment near power lines.
- Establishment of a dedicated vegetation management team to enhance control over clearing strategies and adopt safe arborist techniques.
- Long-term contractual agreements with vegetation management service providers to ensure continuity and consistency in maintenance efforts.

The Company is evaluating strategies to strengthen grid infrastructure, improve generation flexibility, and deploy enhanced monitoring technologies to mitigate risks associated with extreme weather events. Lessons from 2024 will inform future investments in climate resilience, preventive maintenance, and operational adaptability to enhance reliability in the face of evolving environmental and grid demands.

Furthermore, if BEL is to support the integration of increased renewable energy sources, the Company will need to make investments that cater for the intermittency of these resources which can introduce fluctuations in voltage and frequency and can lead to power quality issues, equipment damage, and outages if not managed properly. Investments in grid automation, energy storage, and enhanced forecasting tools are essential to mitigate these risks.

Targeted investments are essential to mitigate voltage fluctuations, frequency deviations, and power quality risks. These include:

- Energy storage solutions to support frequency regulation, grid balancing, and voltage stabilization.
- Enhanced SCADA systems for real-time monitoring and automation enabling rapid response to voltage and frequency deviations.
- Automated reclosers and voltage regulators will enhance BEL's ability to detect and correct power quality issues instantly, minimizing outages and improving service reliability.

1.6.3 Transmission & Distribution Efficiency (Losses)

In 2024, total system losses increased to 12.6%, reflecting a moderate rise compared to previous years and surpassing the 10-year average of 11.95%. This remains higher than the regional benchmark of 11% for Caribbean countries, many of which have

significantly higher population densities—typically 5 to 10 times greater than Belize—allowing for more efficient grid utilization.

The 2024 system losses consist of:

- Transmission losses of 5.9%, slightly above the 10-year average of 5.67%, reflecting higher overall energy demand and significant increases in inductive loads, heat-induced inefficiencies, and dust-related equipment challenges.
- Distribution losses of 6.6%, an increase from 6.0% in 2023, driven by factors such as higher inductive load levels, aging distribution infrastructure, increased electricity theft, and system overloads resulting from prolonged periods of high demand.

While the upward trend in losses is a concern, BEL is implementing targeted strategies to mitigate these:

- Grid modernization efforts to improve transmission efficiency.
- Targeted loss-reduction initiatives in high loss areas to reduce system overloads and inefficiencies.
- Advanced metering and monitoring technologies to detect and prevent energy theft.
- Enhanced vegetation management strategies to minimize infrastructure disruptions in the medium to long term.

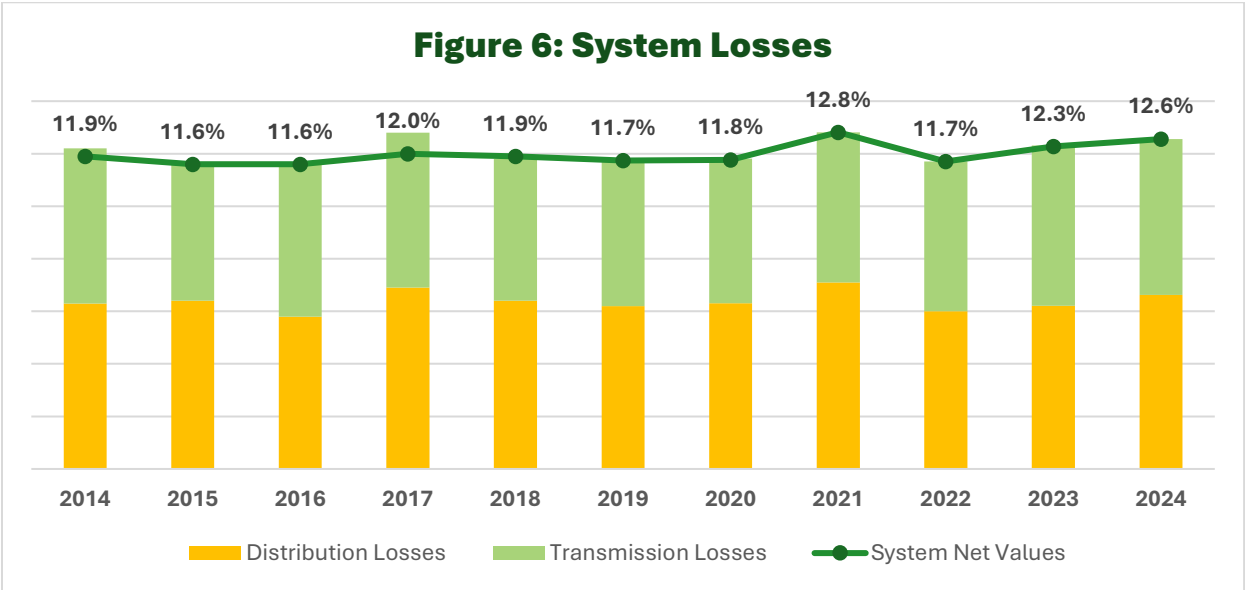


Figure 7: Transmission Losses

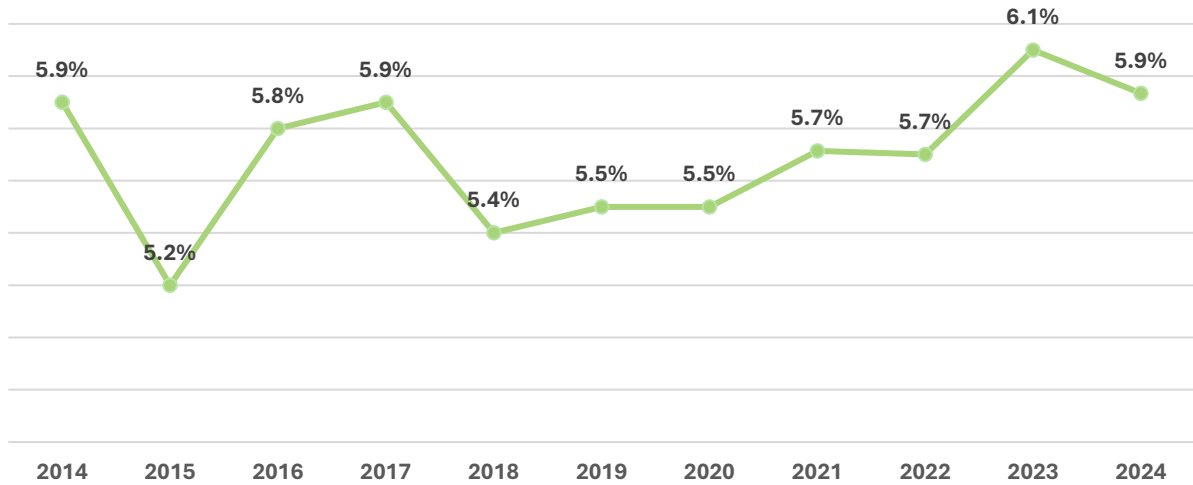
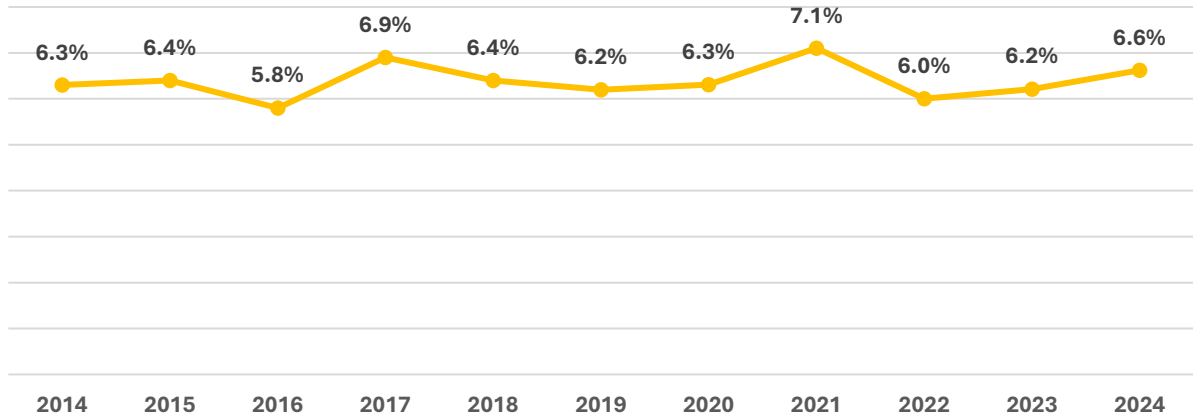


Figure 8: Distribution Losses



1.6.4 Universal Access

From 2020 to 2024, BEL invested an average of \$33 MN annually in distribution system expansion, connecting 2,000 new customers per year and improving grid accessibility nationwide. By 2024, total customer accounts reached 113,682, a 25% increase from 2016, while electricity sales grew by 30.4%, from 540,921 MWh in 2016 to 705,284 MWh in 2024.

This growth reflects expanding electrification, economic development, and rising demand across residential and commercial sectors. Implementation of the proposed strategic capital projects will enable BEL to expand and strengthen the electricity grid, integrate renewable energy solutions, and improve service affordability for all Belizeans.

To further accelerate universal electrification, BEL is investing in energy solutions tailored to Belize’s unique geographic and socio-economic landscape. The Company’s electrification strategy includes:

- **Grid Expansion Projects** extending distribution infrastructure to connect rural villages and remote communities currently beyond the reach of the national grid.
- **Renewable Off-Grid** and, where possible, Grid-Connected Solutions by deploying solar microgrids and hybrid energy systems to provide reliable electricity to areas where traditional grid extension is economically unfeasible. This work is being carried out in collaboration with Government and other stakeholders.
- Implementing **Rural and Peri-urban Electrification Programs** to target communities with identified limited energy access, such as those in the Toledo and Stann Creek Districts, in collaboration with local and international development partners.

Another component of BEL’s programs to achieve Universal Energy Access is developing and strengthening energy affordability and social initiatives. Social programs such as our *Connecting Homes Improving Lives* (CHIL) and *Golden Citizens* Programs enhance access to electricity by providing subsidized connections. The introduction of Advanced Metering Infrastructure (AMI) technologies will allow BEL to deploy prepaid metering options and tailored energy efficiency programs to low-income households.

Moving forward, BEL remains committed to expanding universal access, reinforcing grid capacity, and integrating smart-grid technologies to ensure reliable, sustainable electricity for all Belizeans and to meet national Universal Access goals and commitments by 2030.

Table 2: 2016-2024 Customer Accounts and Electricity Sales

Years	2016	2017	2018	2019	2020	2021	2022	2023	2024
# of Accounts	90,635	94,465	97,714	100,971	103,822	107,292	108,589	110,378	113,682
Sales MWH	540,921	552,478	554,434	588,351	539,269	560,793	601,815	659,273	705,284

1.6.5 Financial and Investment Support

BEL's capital investment surged to \$142.2 MN in 2024, more than double the \$65.1 MN spent in 2023, reflecting a major push toward grid expansion and generation capacity.

Table 3: 2016-2024 Investment History

\$'000	2016	2017	2018	2019	2020	2021	2022	2023	2024
Generation	180	-	194	-	2,116	1,402	12,380	4,823	65,980
Transmission Network	5,963	7,272	4,956	11,831	7,751	8,634	17,948	27,220	28,238
Distribution Network	23,158	18,751	17,197	18,460	18,453	21,667	30,748	26,306	33,062
Operations Equipment	3,111	998	1,623	18,154	2,903	4,423	4,418	5,158	4,052
Land & Buildings	317	520	400	2,187	814	1,094	2,331	1,525	990
Transportation	1,629	1,160	1,633	561	2,206	1,189	1,704	58	2,731
Total	34,357	28,700	26,003	51,193	34,242	38,409	69,529	65,089	142,208

A key initiative was the commissioning of a 21 MW gas turbine in San Pedro. This generation capacity addition was crucial for meeting the escalating energy needs of San Pedro, Belize's premier tourism destination, improving Belize's overall energy security position and ensuring reliable power supply to the national electricity grid. Furthermore, BEL upgraded the Westlake gas turbine (at Mile 8 along the George Price Highway) to 28.5 MW continuous output capacity (from 19 MW). This, along with the added generation capacity in San Pedro, addresses the following needs:

- 1. Increased Firm In-Country Generation Capacity:** Prior to these investments, Belize's national grid was highly dependent on a combination of local renewable energy sources and imported power from Mexico's CFE. While renewables provide clean energy, their output fluctuates seasonally and CFE imports have been increasingly constrained by Mexico's energy market challenges.

With the commissioning of the two gas turbines, Belize's total in-country firm generation capacity increased by over 25%, allowing for greater energy security and reducing the risks associated with external supply disruptions. Together, these two units ensure that the country has sufficient dispatchable power to meet demand.

- 2. Reliability and Energy Security Challenges in San Pedro:** The commissioning of the San Pedro GT directly addresses one of Belize's most pressing energy

challenges – ensuring a reliable and stable power supply to San Pedro, one of the fastest-growing tourism and economic hubs in Belize. Prior to the GT installation, this service area depended primarily on the single submarine interconnection from the mainland, which posed risks of outages when there are grid supply disruptions or . The 21MW GT now serves as a critical backup, ensuring continued supply to the island even in the event of transmission failures or generation shortfalls.

3. Reducing Dependence on Imported Energy and Managing Rising Energy Costs

Belize imports a significant portion of its energy from Mexico’s CFE, However, the reliability of these imports is subject to external factors, including supply constraints, rising energy costs, and geopolitical risks. The GT provides an independent local generation source, reducing reliance on imported power and strengthening Belize’s energy resilience to external price fluctuations and supply restrictions.

Additionally, the GTs enhance system-wide stability by providing fast-ramping capacity that can respond to fluctuations in demand and supply, improving overall grid reliability.

4. Supporting Renewable Energy Integration: As Belize continues its transition towards greater renewable energy penetration, grid stability remains a priority. The intermittency of renewable sources such as solar and wind requires reliable backup generation to maintain a steady supply. The gas turbines offer a rapid-response solution that can quickly compensate for generation output fluctuations from renewables, making it an essential component of a diversified energy mix.

5. Enhancing Disaster Preparedness and Grid Recovery: Extreme weather events pose a significant threat to Belize’s energy infrastructure. Blackstart capabilities allow for islanded operation (when segments of the grid become isolated due to faults) as a backup generation source, enhancing BEL’s disaster response capabilities and, by extension, Belize’s national resilience by ensuring that critical infrastructure (hospitals, sister utilities, and emergency and government services) can remain operational during crises.

Energy Mix and Sustainability

In 2024, BEL’s reliance on renewable energy sources increased to 38.1%, up from 32.5% in 2023, marking a partial recovery in hydroelectric and biomass generation.

However, hydropower generation remains below historical levels, largely due to persistent drought conditions, reinforcing the need for diversification of local generation capacity. To compensate for renewable variability, fossil fuel generation increased significantly, rising from 78,006 MWh in 2023 to 92,262 MWh in 2024, while CFE imports remained high at 407,711 MWh. The average COP per kWh rose to \$0.3029, reflecting greater reliance on our fossil fuel sources as well record high prices from CFE during peak season.

Table 4: Historical Energy Mix and Sustainability

MWh	2016	2017	2018	2019	2020	2021	2022	2023	2024
Hydro	260,503	282,159	247,612	74,569	241,986	157,326	238,766	176,490	226,737
Biomass	78,886	82,339	93,834	91,920	81,333	57,508	93,781	67,907	81,643
Solar	-	573	593	650	568	595	925	944	735
Fossil Fuel	31,845	34,950	53,899	118,320	19,555	50,409	28,535	78,006	92,262
CFE Imports	243,429	230,138	235,155	383,726	270,239	380,195	323,311	430,666	407,711
Renewable	55.2%	57.9%	54.2%	25.0%	52.8%	33.3%	48.7%	32.5%	38.11%
\$COP/kWh	0.2127	0.2239	0.2649	0.2803	0.1929	0.2095	0.2367	0.2542	0.3029

Market Environment

2. Market Environment

2.1 Global Economic Outlook

According to the IMF's January 2025 World Economic Outlook Update, global growth is projected to remain steady at 3.3% in both 2025 and 2026, slightly below the long-term average of 3.7%. While growth in advanced economies remains moderate, the United States is projected to expand by 2.7% in 2025, supported by strong domestic demand and a resilient labour market. This economic resilience in key trading partners signals stability in external market conditions, with implications for Belize's economic trajectory and energy sector demand.

Global inflation is expected to continue its downward trend, declining to 4.2% in 2025 and further to 3.5% in 2026. While advanced economies are expected to reach their inflation targets sooner than emerging markets, signalling a more stable economic environment, energy price volatility – particularly in the heavy fuel oil and deasil markets – remains a critical factor for BEL, given its direct impact on the cost of generation and power procurement. Managing these cost pressures through strategic investments in renewable energy and grid modernization remains imperative for ensuring price stability and long-term sustainability.

2.2 Belize Economic Outlook

Belize's economy has shown significant growth in recent years, with real GDP increasing by 17.9% in 2021 and 8.7% in 2022. The economy continued to expand, achieving a growth rate of 4.5% in 2023, moderating to 3.5% in 2024. Growth is projected to stabilize at 2.5% from 2025 onwards as the economy expands. While this reflects a maturing economic expansion, it also underscores the need for infrastructure investment to sustain long-term productivity gains.

The services sector, particularly tourism, business process outsourcing (BPO), and construction, continues to be a key driver of this economic activity, alongside continued public infrastructure investments. Additional commercial and industrial development will further elevate electricity demand.

Inflation decreased from 6.3% in 2022 to 4.4% in 2023 and is projected to further decline to 3.1% in 2024 and 1.3% over the medium term, reflecting lower global commodity prices. These trends provide a more stable operating environment but

highlight again the necessity for aligning electricity tariffs with cost-effective pricing structures to maintain financial viability.

For BEL, these economic trends signal sustained growth in electricity demand, particularly in sectors that rely heavily on reliable and affordable power, reinforcing the importance of timely investments in generation capacity and grid modernization. Additionally, the government's plan to increase public infrastructure spending by 0.8% of GDP from 2025 onward is expected to support new industrial and commercial developments, further elevating demand for electricity. The tourism industry, which has returned to pre-pandemic levels, is an energy-intensive sector, with increased hotel occupancy, new resort developments, and electrification of services driving higher consumption. Similarly, the expansion of the BPO sector, which operates on extended hours with high air-conditioning and IT-related energy needs, will contribute to greater commercial demand. To meet this rising demand while ensuring reliability and cost stability, BEL must accelerate strategic projects in renewable energy, grid resilience, and demand-side management.

Despite positive growth projections, several economic risks remain, including potential slowdowns in major trading partners (U.S. and Europe), rising global fuel prices, and climate-related vulnerabilities. As Belize remains heavily dependent on imported energy, fluctuations in COP could impact BEL's financial position if rates do not adequately reflect underlying costs.

It is imperative that BEL continue to align its investment strategies with national growth trends while ensuring that its tariff structure supports cost recovery and system expansion to meet the country's evolving energy needs.

2.3 Industry Opportunities and Threats

2.3.1 Evolving Consumer Demand and the Renewable Energy Shift

The global transition to clean energy is reshaping electricity markets, with increasing demand for renewable power and energy independence. Locally, the Government of Belize has set ambitious targets for Belize's transition to a sustainable energy future, emphasizing greater integration of distributed generation, increased reliance on "indigenous" renewable energy resources, and enhanced grid flexibility.

While these developments present opportunities for energy independence, sustainability and customer empowerment, they also introduce new challenges related to grid stability and cost recovery. To address these, BEL must further expedite

investments in smart grid technologies, modernization tools and solutions, demand management solutions, and adaptive pricing mechanisms to ensure reliability and energy security can be achieved throughout the energy transition.

Furthermore, the tourism sector, a major economic driver, is positioning itself as a green destination, accelerating interest in solar energy, distributed generation, and electric vehicles (EVs). While these trends offer growth opportunities, they also present challenges for cost recovery and grid stability, requiring adaptation in BEL's pricing structures and investment strategies.

2.3.2 Electric Vehicle Expansion and Charging Infrastructure

EV adoption is growing, driven by lower battery costs and rising fuel prices. This presents an opportunity for reducing fossil fuel imports and increasing electricity demand. However, these trends require proactive grid planning and tariff adjustments to optimize integration.

BEL is actively supporting EV adoption by:

- Expanding the national EV charging network, with 12 stations already installed.
- Implementing TOU pricing for EVs, encouraging off-peak charging.

A well-planned EV charging infrastructure program can deliver wide-ranging benefits to Belize's energy and transportation sectors. To fully realize the benefits of EV adoption while mitigating potential grid impacts, BEL must prioritize complementary investments that ensure system readiness including:

- AMI and demand management tools to enable BEL to monitor and optimize EV charging loads in real time, reducing grid congestion. AMI will also more easily enable dynamic pricing models and TOU tariffs to promote the shifting of charging to off-peak hours, preventing strain on peak demand resources.
- Substation and feeder upgrades, as envisioned in BEL's 2024 – 2028 FTRP Submission, and again in this 2025 ARP Submission. As EV penetration grows, especially in urban areas, targeted substation reinforcements and distribution feeder enhancements will be required to support localized demand spikes.
- Upgrades to BEL's Customer Information Systems (CIS) platforms for enhanced billing to accommodate public and fleet EV charging, ensuring fair cost allocation for these high demand customers.

Power Supply

3 Power Supply

3.1 Power Supply Resources

The Company's power supply resources include the following:

- i. **Fortis Belize Limited (FBL):** BEL purchases power from three hydroelectric generation facilities owned by FBL located on the Macal River in the Cayo District:
 - The 25MW Mollejon facility, under a 50-year PPA that began on April 1, 1996.
 - The 7.3MW Chalillo facility, under an amended and restated PPA including the Mollejon facility.
 - The 19MW Vaca facility, under a 50-year PPA that began on January 22, 2010.

The energy costs associated with power produced from the Chalillo and Mollejon hydroelectric plants are specified as:

- i. A fixed net energy output price for energy less than or equal to 100 GWh, which escalates by 1.5% per year on April 1st of each year, and
- ii. A lower, non-escalating fixed energy output price (\$0.05 USD per kWh) for project energy greater than 100 GWh during an operating year.

Energy produced by the Vaca hydroelectric plant is priced as follows:

- i. A monthly capacity payment, and
 - ii. A net energy output price
- both of which are subject to yearly escalation.*

- ii. **Hydro Maya Limited (HML):** The 2.6 MW run of the river hydro-electric generation facility located on the Rio Grande River in the Toledo District was originally contracted under a 15-year original PPA dated 15 September 2003, modified in 2005 and 2007. BEL signed a subsequent contract for power sale and purchase on in 2022, which remained valid through to 2023. Given the shared advantages, BEL and HML wish to establish a new contract for long-term supply continuity. Energy produced by the plant is sold to BEL a fixed non-escalating price.
- iii. **Belize Co-generation Energy Limited (BELCOGEN):** The 13.5-megawatt co-generation facility adjacent to the Belize Sugar Industries (BSI) Limited Tower

Hill sugar factory located in the Orange Walk District was contracted under a 15-year PPA dated 2 February 2007. BEL entered a 1-year extension for the continued sale and purchase of power in 2024. Negotiations are underway for a new long-term agreement.

The energy cost associated with the supply of power from the BELCOGEN plant is specified as a fixed net energy output price per annum subject to an annual escalation.

- iv. **SS Energy Limited (SSEL):** SSEL operates a 16.5MW co-generation facility located in Valley of Peace, Cayo District. An allocation of 8MW of electrical power generated by the facility is sold to BEL under a 15-year term original PPA dated 13 December 2016, and currently under a 12-year term amended agreement dated 21 December 2022.

The energy cost associated with the SSEL plant is specified by fixed net energy output contract prices for supply (i) less than and equal to 20 GWh per contract year, and (ii) energy exceeding 20 GWh per contract year. These prices can in turn vary depending on the availability of the plant within each 24-hour period.

- v. **Blair Athol Power Company Limited (BAPCOL):** BAPCOL operates a 22.5MW thermal generation facility (three 7.5 MW engines operating on heavy fuel oil, HFO) for firm capacity and associated energy, located on the Placencia road in the Stann Creek District.

The power associated with BAPCOL-owned generation is sold to BEL under a 9-year term agreement originally drafted for 15MW firm capacity and associated energy dated 2015. A revised agreement in 2018 expanded firm capacity and associated energy to 22.5MW with the existing term and conditions applied.

The energy costs associated with BAPCOL project are specified by:

- i. a monthly capacity payment, subject to an annual escalation, and
- ii. an associated payment for online maintenance cost and lube oil consumption based on the facility's net energy output, also subject to an annual escalation factor.
- iii. BEL purchases and supplies the fuel used by the facility.

In consideration of the mutual benefits derived, BEL and BAPCOL desire to enter a new, long-term agreement, however with a reduced capacity charge.

- vi. **BEL-Owned Generation:** BEL owns a power station consisting of mobile diesel-powered generating units located on the island of Caye Caulker and two diesel-powered General Electric (GE) gas turbines including: the 28MW Westlake Gas Turbine Facility located at Mile 8 George Price Highway in the Belize District, and the 21MW facility located near the southern tip of Ambergris Caye.

The cost associated with BEL-owned generation is specified by

- i. a monthly capacity charge, which is the depreciation cost of the generating unit; and
- ii. operating costs, including fuel, labour, maintenance etc. that can be directly attributed to energy generated and sold to consumers from the generating unit.

- vii. **Comisión Federal de Electricidad (CFE), Mexico:** BEL sources up to 55 MW of power from CFE Calificados, a subsidiary of CFE, the national electric utility of Mexico. The power associated with CFE opportunity power is sold to BEL primarily under a Framework Contract dated February 2012 that governs an Opportunity Energy Agreement dated February 2012 and amended in 2014 and an Emergency Assistance Agreement dated 2012.

Pricing is tied to Mexico's wholesale electricity market:

- Local Marginal Price (LMP) of the 'Mercado del Día en Adelanto, MDA' (day-ahead market) and the 'Mercado de Tiempo Real, MTR' (real-time market) corresponding to the day and hour of operation at the XUL-HA '08XUL-115' node with 15% mark-up on the LMP.
- A 'Tarifas Reguladas, TR' (regulated tariff) – additional government-imposed delivery cost by the Government of Mexico.

3.2 Wholesale Power Supply Portfolio Optimization

BEL currently relies on a bottom-up optimization model to ensure the long-term resources of the future wholesale power market. The primary objectives of BEL's wholesale power supply portfolio optimization are:

- i. to ensure that the Company has sufficient firm resources to meet expected load requirements
- ii. to ensure the availability of cost-effective reliable power

- iii. to evaluate the impacts, costs, and financial risks of the various scenarios and manage the exposure to the cost and availability of market power supplies
- iv. to optimize the value of any surplus resources that are not needed to meet load requirements.

- *About the Parameters*

Parameters considered in the model are hydro power availability, biomass power availability, electricity demand, fuel cost, and electricity import price. Parameters which carry a degree of uncertainty, including power demand requirement and marginal price of electricity imports, rely on deterministic predictive algorithms to generate profiles using historical data assuming similar distributions to previous observations.

- *About the Constraints*

The power balance constraint is a fundamental constraint which ensures that the sum of generated power is equal to the power required at each interval, thereby maintaining the balance of supply and demand of power. It is important to note that this function excludes operational reserve capacity, as the operational reserve is based on providing power as needed, not scheduled electricity delivery.

Plant constraints are based on projected operating conditions. The generators' characteristics (minimum and maximum capacity, ramp-up and down capacity (how much more or less the generator can produce from one period to the next), availability, fixed cost of operating the generator, variable cost of producing one unit of electricity per period, and so on) are among the constraints. Supply scenarios were incorporated by adjusting plant availability constraints. These represented overrides to the least cost objective e.g. cycling the availability constraint of hydropower in-line with water management protocols. Each power plant was assigned a unit variable cost. Steady-state conditions for a specific power unit or supply are assumed, and restrictions relating to stability and power quality are not explicitly expressed beyond a unit's or supply source's operating limits.

- *About the Decision Variables*

Power plants are assigned a variable for its power generation during each hour of the simulated time frame. The decision variables determine the optimal times and levels for running power generators to meet electricity demand. in order to

satisfy the demand for electricity at each time interval, the decision variables for all generating type units include: four binary decision variables indicating if the unit is available for operation, if the unit has been turned on, if the unit is operational, and if the unit has been turned off, as well as a continuous positive integer to capture the total power output for each generator.

- *About the Objective*

To determine the value of each variable, the model reduced an objective function that included the total of all expenses. A fixed cost of using a unit during an interval (regardless of its production level) if applicable, a fixed cost of starting the unit on a given interval (regardless of the starting production level) if applicable, and a variable cost proportional to the production of a unit (in general, corresponding to resource consumption). The model subsequently represented Belize's energy supply market using the provided inputs and generated output information, mainly in the shape of energy supply schedules and allocations, from which cost of power estimates were calculated.

3.3 BEL Projected Power Purchase Market Conditions and Expense

3.3.1 2024/2025

BEL's projected gross demand for 2024/2025, after factoring in energy efficiency measures and customer energy management, is 825.30 GWh, with a total annual cost of BZ\$197.1 MN resulting in an expected COP of BZ\$0.2388 /kWh (Table 5). This represents a 4.4% increase in gross demand compared to the 2023/2024 actuals. However, the total cost is expected to decrease by 14.8% from the previous year. To summarize:

- Projected gross demand: 825.3 GWh
- Projected annual power purchase cost: BZ\$197.1M
- Estimated Cost of Power: BZ \$0.2388 / kWh

In contrast, conditions of a pessimistic outlook for 2024/025 considers the following:

- A 1.5% increase in planned gross demand
- CFE's high price profiles of January to June 2024 for January to June 2025
- A neutral weather outlook, as opposed to a wetter La Niña-type scenario, is expected for the Western region, potentially leading to a 6.8% reduction in planned production at Fortis' Mollejon & Chalillo facilities and a 3.6% decrease at the Vaca facility

Under pessimistic conditions, the scenario projects a total gross demand of 837.4 GWh, 1.5% higher than the base case, with an estimated total cost of \$225.4 MN. This highlights a potential 14.4% increase in power purchase expenditure if the conditions of the pessimistic outlook materialize. Consequently, the wholesale COP would rise from BZ\$0.2388/kWh in the base case to BZ\$0.2692/kWh.

Under both base and pessimistic scenarios, the rise in demand is largely driven by higher cooling requirements, particularly in the residential sector, along with sustained economic growth. Meanwhile, cost reductions are attributed to low CFE prices of late 2024 and BEL's ability to better hedge high CFE prices during the peak months of early 2025 using in-country thermal and hydro reserves.

Similar to early 2024, high CFE prices and capacity curtailments are expected to continue through May and June 2025. Due to anticipated capacity shortages and congestion in the Yucatán Peninsula, the opportunity energy available to Belize is projected to decline to an average of 22 MW in May and 7 MW in June.

However, with the upgrade of the Westlake GT facility from 19 MW to 28 MW and the installation of the 21 MW San Pedro gas turbine facility in late 2024, in-country thermal capacity has increased. Additionally, local weather conditions in 2025 are expected to be neutral to wetter (La Niña-type), leading to greater hydropower potential compared to early 2024.

While these wetter conditions may lead to reduced biomass output, the increased installed thermal capacity and favourable hydro outlook are expected to improve in-country reserve margins for 2024/2025. Higher reserve margins will allow BEL to offset more expensive CFE power, which previously had no viable alternative.

Still, supply shortfalls remain a concern, as low reserve margins could lead to the risk of load shedding in early 2025. In its role as the Single Buyer in the electricity market, BEL formally notified the PUC on November 7, 2024, of anticipated significant shortfalls in generation capacity during peak months, necessitating the procurement of additional generation services beyond existing resources.

3.3.2 2025/2026

The projected gross demand for 2025/2026 is estimated at 888.2 GWh, with an annual total cost of BZ\$227.9 MN, resulting in an expected cost of production (COP) of

BZ\$0.2566/kWh—an increase of 7.4% from 2024/2025. This represents a 7.6% rise in gross demand and a 15.6% increase in total cost compared to 2024/2025. In-country installed capacity is expected to grow starting in April 2026 with the addition of utility-scale solar PV. While the integration of solar PV is anticipated to help lower the overall COP, the projected increase in COP for 2025/2026 is primarily driven by higher in-country thermal dispatch required to meet rising demand before the solar PV becomes commercially operational.

3.3.3 2026/2027

The projected gross demand for 2026/2027 is estimated at 938.4 GWh, with an annual total cost of BZ\$233.4 MN, resulting in an expected cost of production (COP) of BZ\$0.2488/kWh—a 3.1% decrease from 2025/2026. This represents a 5.7% increase in gross demand and a 2.4% rise in total cost compared to 2024/2025. The anticipated integration of solar PV generation is expected to lower the overall COP by offsetting in-country thermal dispatch and reducing reliance on high CFE prices, particularly during intra-day afternoon peak hours. Additionally, planned projects aimed at addressing generation and congestion challenges in the Yucatán Peninsula region are expected to drive down CFE prices in early 2027 compared to previous peak seasons.

3.3.4 2027/2028

The projected gross demand for 2027/2028 is estimated at 987.3 GWh, with an annual total cost of BZ\$245.5 MN, resulting in an expected cost of production (COP) of BZ\$0.2487/kWh—a slight decrease of 0.04% from 2026/2027. This represents a 5.2% increase in both gross demand and total cost compared to 2024/2025. COP is expected to stabilize between 2026/2027 and 2027/2028 as further integration of solar PV leads to a generation increase of up to 50%. However, despite growing demand, reliance on CFE power remains relatively unchanged, with only a 1.9% decrease.

TABLE 5: Production (Dispatch) Outlook

MWh Production	2024/2025 Base	2024/2025 Pessimistic	2025/2026 Base	2025/2026 Pessimistic	2026/2027	2027/2028
Fortis Belize- Mollejon & Chalillo	146,709	136,712	137,669	137,669	137,669	137,669
Fortis Belize- Vaca Only	80,089	77,218	62,551	62,551	62,551	62,551
CFE	395,255	384,839	421,601	423,698	399,421	391,795
Hydro Maya Limited	11,665	11,230	11,574	11,574	11,574	11,574
BELCOGEN	42,473	41,480	43,228	43,228	43,228	43,228
BAPCOL	73,116	74,523	124,885	119,464	81,038	48,702

Santander	29,550	33,758	33,130	33,130	33,130	33,130
Diesel Westsub Gas Turbine	27,570	46,090	20,410	23,313	17,924	24,485
Diesel - CCK and Other Generation	15,144	18,922	9,733	9,916	8,003	8,596
Diesel - San Pedro Gas Turbine	3,178	11,450	590	829	413	1,049
JICA (UB Solar)	21	281	-	-	-	-
PSF (Solar) 2022	542	871	577	577	577	577
New Solar	-	-	22,281	22,281	142,899	223,928
New Wind	-	-	-	-	-	-
Total Production	825,312	837,375	888,231	888,231	938,427	987,285
Total Costs \$'000	197,112	\$225,446	227,920	\$211,903	233,440	245,497
Cost per kWh	0.2388	\$0.2692	0.2566	\$0.2386	0.2488	0.2487

Revenue Forecast

4 Revenue Forecast

4.1 Load Forecast

The kWh sales forecast is a critical component of this submission. The forecasting process is anchored in a forward-looking assessment of Belize’s evolving energy landscape, integrating macroeconomic indicators, sectoral development, and emerging electrification trends. The foundation of this forecast is a projection of demand for energy at the generation (energy supply) end by applying time series and regression analysis on the more recent historical data. An estimated loss factor is applied to the gross generation forecast to yield the net demand forecast at the consumer end. This loss factor accounts for projected technical losses (transmission and distribution line losses) and non-technical losses (including theft and metering discrepancies) and is derived from historical trends and consideration of the impacts of planned loss reduction programs and projects.

The total demand at the consumer end is then allocated across the various customer classes based on an in-depth analysis of historical consumption patterns. This method ensures that the distribution of sales reflects actual market behaviour, while also allowing for adjustments based on sectoral growth, economic trends, and evolving electricity demand. The varying impacts of economic expansion, government policy, and proactive market growth initiatives by BEL on the different customer classes are also taken into account to refine demand projection at this stage. This includes factors such as growth in the tourism and commercial sectors, the rising adoption of electric vehicles (EVs), policy incentives for distributed generation and energy efficiency, and demand-side management initiatives.

TABLE 6: Forecasted kWh Sales 2025 - 2028

kWh	2025	2026	2027	2028
Total Sales	751,405,400	800,937,210	844,672,463	885,801,461

TABLE 7: Sales Distribution by Customer Class 2025 - 2028

	2025	2026	2027	2028
Social	1%	1%	1%	1%
Residential	33%	31%	29%	27%
Commercial	19%	18%	18%	17%
Commercial II	28%	26%	25%	23%
Industrial II	7%	7%	7%	8%
Streetlight	3%	3%	3%	2%

Distributed Generation	5%	8%	11%	14%
Electric Vehicles	0%	0%	1%	1%
Wholesale Energy	0%	0%	0%	0%
Tourism	5%	5%	6%	7%

4.2 Tariffs

The tariff framework is designed to balance revenue sufficiency with affordability, ensuring that cost recovery mechanisms align with industry practices while reflecting the unique characteristics of the Belizean market. The current tariff structure follows a volumetric pricing model for traditional revenues, while non-traditional revenues include demand charges and time-of-use pricing elements for emerging customer segments.

4.2.1 Traditional Revenues

For traditional electricity sales, a volumetric pricing model is applied, with prices held at an average of \$0.40 per kWh through to June 30, 2025, and increasing to, as a minimum, \$0.43 per kWh with effect from July 1, 2026. The tariff structure consists of tiered rates by customer class, with differentiated pricing for residential, social, commercial, industrial, and street lighting categories underpinned by cost-of-service principles, ensuring fairness across all customer classes.

Key features include:

- **Residential and Social Classes:** Block-based pricing ensures affordability for essential electricity use while encouraging energy efficiency.
- **Commercial and Industrial Customers:** Separate rate structures, reflecting cost-based allocation and demand patterns.
- **Service Charges:** where applicable, such as fixed charges for industrial customers to cover grid infrastructure costs, ensuring long-term sustainability.

4.2.2 Non-Traditional Revenues

BEL introduced demand-based and time-of-use pricing models for Distributed Generation (DG), Electric Vehicles (EVs), Wholesale Customers, and Tourism-related consumption, previously approved under a Regulatory Sandbox Model in 2024 and based on recommendations from BEL to promote introduction of dynamic rate design and revenue diversification.

The non-traditional tariff framework consists of:

- Cost-reflective pricing for peak demand contributions in the form of demand charges for consumers with high-capacity requirements (e.g., DG, EV fleets, and wholesale users).
- Peak and off-peak energy charges, aligning with the cost to serve customers during different demand periods.
- Dynamic pricing models, providing incentives for load shifting and efficient energy use.

As a result of this hybrid pricing model, the overall average price per kWh sold is projected to increase from \$0.40/kWh to \$0.43/kWh, reflecting the combination of volumetric pricing and demand-based TOU structures. This structure enhances cost recovery while maintaining a fair and balanced approach to rate-setting.

TABLE 8:

Year	2024 2025	2025 2026	2026 2027	2027 2028
Per Kwh sold	0.40	0.41	0.43	0.43

Other Revenues

5 Other Revenues

BEL recognizes several ancillary revenue streams under "Other Revenues," which provide supplementary financial contributions beyond traditional electricity sales. These revenues encompass Service Installation fees, Rent from Distribution Property, Capital Contribution Amortization, and Miscellaneous Income.

From a tariff perspective, Other Revenues serve as an offset in the revenue requirement calculation, reducing the overall costs that must be recovered through electricity tariffs. By incorporating these revenues into the Tariff Basket, they help mitigate upward pressure on rates, ensuring that electricity prices remain as cost reflective as possible.

5.1 Service Installation Fees

Service Installation fees pertain to charges levied for the establishment of new electrical connections or the modification of existing ones. These fees are designed to recoup the costs associated with labour, materials, and administrative processes involved in service installations. Given the standardized nature of these services and the relatively stable cost structure, projections for Service Installation fees are maintained at a constant level throughout the forecast period. This approach aligns with historical data, which indicates minimal fluctuations in these revenues.

5.2 Rent from Distribution Property

This revenue category includes income derived from leasing BEL's distribution infrastructure, such as poles and conduits, to third parties. The contractual agreements governing these leases typically span multiple years with fixed terms, resulting in predictable and stable revenue streams. Consequently, Rent from Distribution Property is projected to remain constant over the planned period.

5.3 Customer Capital Contribution

Capital Contributions from Customers are funds provided by Customers to support specific infrastructure projects, such as extending service to new developments or enhancing existing infrastructure. Unlike the other revenue components, these contributions are directly linked to Customer-driven projects and are influenced by factors such as economic growth, urban development, and population expansion. Given the anticipated economic growth and infrastructure development in Belize, it is expected that Customer-driven projects will increase, leading to higher capital

contributions. Therefore, projections for Capital Contributions from Customers are adjusted to reflect this anticipated growth, in contrast to the other revenue streams, which are held constant.

Capital Contribution Amortization, which flows from Capital Contributions represents the systematic recognition of customer-funded contributions toward specific capital projects. These contributions are amortized over the useful life of the related assets, providing a steady and predictable revenue stream. Given the established amortization schedules and the historical consistency in capital contributions, this revenue component is projected to remain steady during the forecast period. *Note, however, that capital contribution amortization is a non-cash item and does not offset the revenue requirement as other components of other revenues.*

5.4 Miscellaneous Income

Miscellaneous Income encompasses various minor revenue sources, including fees for ancillary services and other non-recurring income. Due to the unpredictable and sporadic nature of these income sources, and their historically minimal impact on overall revenues, Miscellaneous Income is projected to remain constant throughout the planned period.

In summary, while Service Installation fees, Rent from Distribution Property, and Miscellaneous Income are projected to remain constant due to their stable and predictable nature, Capital Contributions from Customers are expected to vary in line with economic and developmental trends.

TABLE 9: Other Revenues

\$'000	2025	2026	2027	2028
Service Installation	1	1	1	1
Rent from Distribution Property	2,489	2,489	2,489	2,489
Capital Contribution Amortization	2,112	2,182	2,207	2,232
Miscellaneous Income	1,440	1,440	1,440	1,440
Other Revenues Total	6,042	6,112	6,137	6,162

Operating Expenses

6 Operating Expenses

6.1 Summary of OPEX for 2024-2025

BEL's operating expenses (OPEX) have consistently exceeded regulatory thresholds over the past regulatory period, reflecting the growing financial requirements associated with maintaining a resilient and modernized grid. As BEL advances its strategic objectives aligned with Belize's growing energy demands, ensuring adequate OPEX provisions is critical to sustaining reliability, resilience, and service excellence.

FTRP 20|24 approved OPEX was for \$133 MN or \$33 MN on average annually during the period. Between 2020 and 2024, the Company's actual OPEX surpassed the PUC-approved OPEX thresholds by an average of \$2 to \$4 MN annually. This variance is expected to increase as BEL continues to reinforce, expand, and modernize its energy delivery infrastructure to meet rising consumer demand for safe, reliable, and sustainable energy solutions.

BEL had proposed OPEX of \$194 MN or \$48.5 MN on average annually for the FTRP 24|28, however approved OPEX was \$155 MN or \$38.8 MN on average annually. This represents an estimated gap of \$10M, limiting and even compromising BEL's ability to meet operational requirements, potentially constraining investments in workforce development, system maintenance, and Customer Service enhancements.

Operating expenses in capital-intensive industries such as electricity transmission and distribution are primarily influenced by the scale of assets in service and the volume of electricity delivered (MWh). As infrastructure expands and system demands increase, operating costs must align proportionally to support system reliability and customer service excellence.

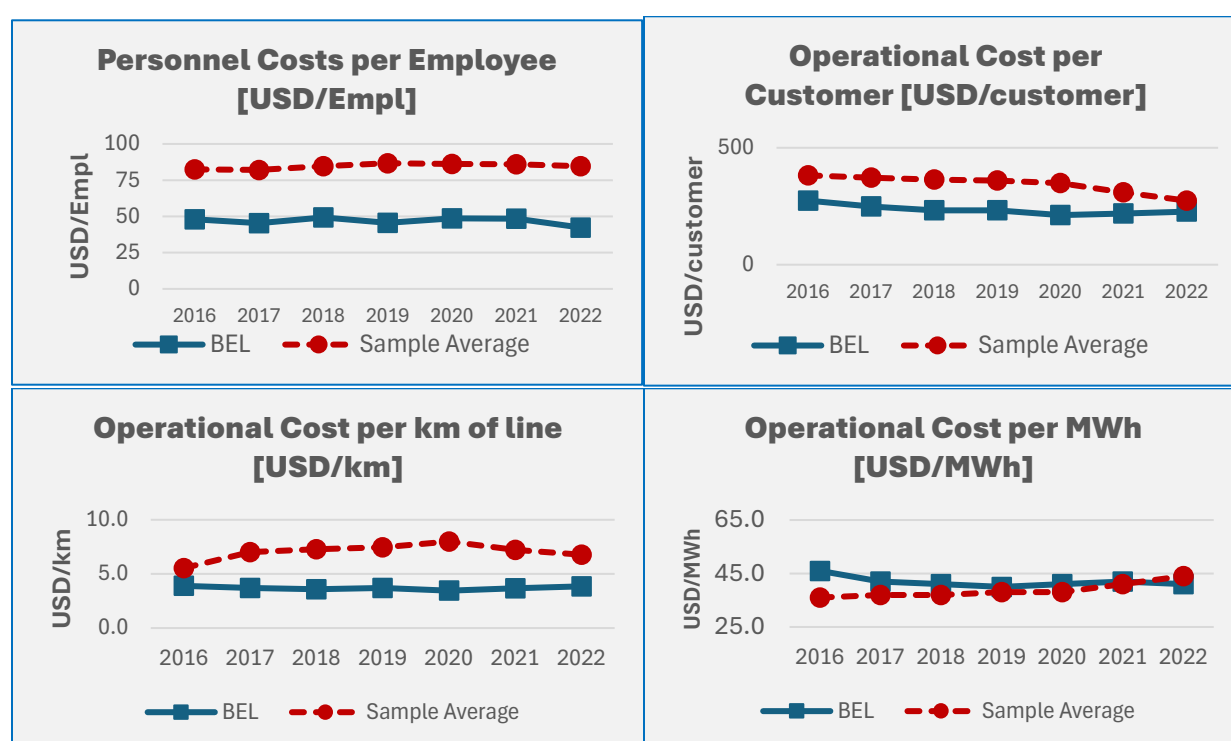
When measured against regional industry standards, BEL's operating cost inputs per unit of electricity sales (MWh) and per dollar of assets-in-service indicate a competitive and prudent cost structure, demonstrating both lower personnel compensation and cost-effective management of assets and resources.

6.2 Benchmarking Study: BEL's Efficiency

A 2024 draft report of an international benchmarking study, commissioned by the Millennium Challenge Corporation, evaluated 68 electric utilities (including BEL) from

13 countries in Central and South America over the period 2016 to 2022 found the following:

- BEL's personnel costs per employee were significantly lower than the sample average (50% of sample average value in 2022).
- BEL's total operational costs per Customer were lower than the sample average throughout the assessment period.
- BEL's total operational costs per kilometre of line were significantly lower than the sample average throughout the assessment period.
- BEL's total operational costs per MWh of sales were on par with the sample average.



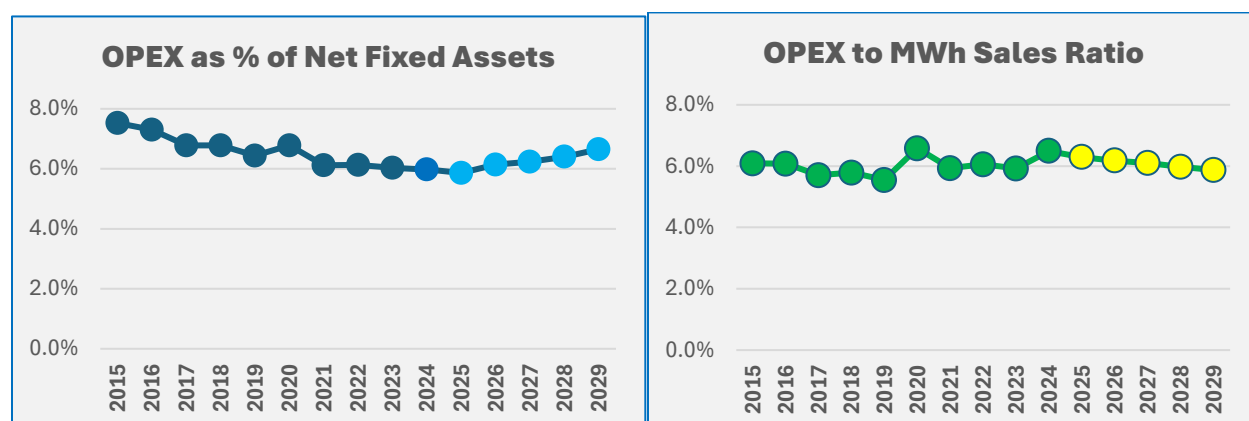
One critical factor influencing BEL's efficiency rankings was the inclusion of transmission and substation costs in its operational cost comparisons against primarily distribution-focused utilities. If the benchmarking had focused on a more comparable sample of utilities that operate both transmission and distribution networks, BEL's efficiency performance would likely have been ranked even higher.

6.3 Historical and Forecasted OPEX Trends

Over the past 10 years, as expected in a capital-intensive industry where the level of assets in service is driven by throughput, BEL's OPEX as a percentage of its net fixed

assets has declined slowly from 7.5% to 6.0%; on the other hand, the OPEX to MWh sales ratio (expressed as a percentage) has remained relatively constant at 6.00%.

OPEX as a % of net fixed assets is projected to average 6.26% over the plan period; while OPEX to MWh sales ratio is projected to average 6.08% over the plan period.



6.4 Breakdown of 2025 OPEX

BEL's operating expenditures reflect ongoing efforts to meet Customer and system demands in accordance industry best practices and regulatory compliance requirements and to support workforce sustainability.

The forecasted Operating Expenses (OPEX) for 2025 (\$46.196 MN) are broken down as follows:

Table 10: OPEX Allocation by Category

Description	Proportion
Payroll Expenses - Labour & Wages	46%
Contract Labour	10%
Computer Hardware and Software Support	5%
Vegetation Management	5%
Employer Medical, Life and Social Security Expenses	4%
Company Taxes and Fees	4%
Other	27%

6.5 Cost Drivers and Justifications

6.5.1 Workforce Competitiveness and Compensation Challenges

As the PUC is aware, BEL must employ a highly skilled technical and administrative workforce to maintain efficient utility operations. However, the Company faces intense competition both locally and regionally in attracting and retaining qualified personnel, particularly in the areas of technical field operations, engineering, project management, finance, and procurement.

Utilities in countries such as the Cayman Islands, Bermuda, and the Bahamas have been actively recruiting skilled powerline technicians, engineers, and project managers from Belize and the other Caribbean nations by offering more lucrative compensation packages. This is partly because they are also experiencing a severe loss of skilled professionals to larger, better-resourced markets in the Caribbean (e.g., Trinidad & Tobago, Jamaica, and Barbados) and even to more competitive markets in North America, Europe, and the Middle East, where salaries and benefits far exceed those offered within the region, resulting in high turnover rates and loss of institutional knowledge. For example, over the past five years, several of the Company's powerline technicians have been recruited to the Cayman Islands alone, lured by higher salaries and enhanced benefits. This is evidenced by a 2022 report from the Caribbean Electric Utility Services Corporation (CARILEC), which highlights the persistent shortage of electrical and mechanical engineers across member states.

To address these challenges, BEL must align compensation structures with regional utility benchmarks while also ensuring that remuneration is competitive relative to other industries in Belize, such as finance, telecommunications, and tourism. For this reason, BEL has implemented several strategic workforce initiatives, including:

- A comprehensive Job Evaluation and Remuneration Review (JERR) in 2021, conducted by Korn Ferry (formerly Hay Consulting Group), to assess its salary competitiveness relative to both the local and regional labor markets. As a result, the Company implemented an upward adjustment in its salary scales, increasing the midpoint of all salary bands by an average of 15.9%. This led to a one-time average base salary increase of 5.1% for non-management employees and 5.6% for management employees.
- Structured annual compensation adjustments, providing an average annual salary increase of approximately 4.6% since 2020.
- Strengthened performance-based incentive structures to remain competitive and encourage talent retention.

Despite these efforts, BEL continues to experience recruitment challenges in key disciplines, particularly in tourism-driven service areas, where competition for skilled workers is heightened due to the demand from the hospitality and private energy sectors.

Moving forward, BEL recognizes the need for strategic workforce planning, continual remuneration adjustments to remain competitive with regional labour markets, and additional non-monetary incentives, such as enhanced training programs, career progression opportunities, and flexible work arrangements, to mitigate talent attrition. The Company remains committed to collaborating with local institutions, industry partners, and regional stakeholders to ensure a sustainable pipeline of skilled professionals to support Belize's energy infrastructure.

6.5.2 Scaling Operations and Workforce Growth to Meet Future Demands

As previously noted, the scale of work at BEL is directly correlated with the expansion of net fixed assets in operation. Since 2020, the Company's net fixed assets have grown by 28%, reflecting ongoing investments in infrastructure, system upgrades, and service improvements. Looking ahead, this figure is projected to increase by an additional 50% by the end of 2028, driven by strategic capital projects, grid modernization, and expanding service coverage.

Concurrently, customer expectations are evolving, with increasing demands for faster, more reliable service delivery and enhanced engagement across both traditional (in-person and call center) and non-traditional (digital platforms and self-service portals) channels. As digital transformation reshapes the utility sector, BEL must continuously innovate to meet these growing expectations while maintaining service excellence.

To support this operational growth, BEL's workforce has expanded over the past four years, reflecting the need for additional technical, administrative, and customer service personnel. Staffing levels are expected to rise by an additional 10% to 15% over the next four years, aligning with the Company's infrastructure expansion and service enhancement initiatives. This workforce expansion will be critical in ensuring that BEL can effectively manage its growing asset base while delivering the high-quality service that customers expect.

In alignment with regional utility workforce trends, BEL must also strategically scale its workforce to meet the increasing demand for energy services while optimizing

operational efficiency. Many North American and Caribbean utilities are investing in workforce expansion to address aging infrastructure, increased electrification, and evolving energy market dynamics. However, scaling efforts are being balanced with automation and digitalization to ensure that workforce growth is aligned with efficiency gains rather than unchecked expansion.

Another significant factor is the transitioning of the energy sector toward smart grid technologies, distributed generation, and digitalized operations. This shift requires specialized expertise that is in short supply both locally and regionally. The need for advanced engineering and operational competencies have outpaced traditional workforce development, requiring substantial investment in upskilling and specialized training.

BEL is implementing a workforce development strategy that accounts for the increased need for technical expertise in grid modernization, renewable energy integration, and customer-centric digital solutions. While some roles may be automated through AI-driven and digital solution oriented operational systems, the Company is focused on upskilling its workforce for high-value analytical and technical positions. By investing in training and digital tools, BEL aims to reduce manual transactional work and create a workforce capable of managing advanced energy technologies and improving service delivery.

Investments in competitive compensation, workforce development, and talent retention are critical to maintaining operational excellence, service reliability, and long-term financial sustainability. Without such investments, the ability to meet increasing consumer expectations, execute capital projects, and transition to a modern energy infrastructure will be severely constrained.

6.5.3 Investing in IT & Cybersecurity to Modernize the Grid and Enhance Customer Engagement

As the energy sector transitions toward a more digital, decentralized, and data-driven future, investments in Information Technology and Cybersecurity (IT&C) are fundamental to grid resilience, operational efficiency, and enhanced customer experiences.

The rise in Information Technology and Cybersecurity (IT&C) expenses is a direct result of BEL's commitment to modernizing the national electricity infrastructure. As grid automation and business efficiency become increasingly critical, BEL has continued

to advocate for the PUC to allocate dedicated provisions for IT&C investments. These advancements are essential for greater operational resilience, enhanced service reliability, and improved customer engagement.

Key projects driving IT&C operational expenses include:

- Advanced Metering Infrastructure (AMI) deployment, enabling real-time monitoring, remote meter reading, and enhanced energy management.
- Business intelligence and analytics tools (e.g., Power BI) to enhance data-driven decision-making, improved load forecasting, customer usage pattern analysis, greater predictive maintenance (reducing unplanned outages and impact to customers), and enhanced regulatory reporting.
- Field management software to optimize workforce efficiency and service response times.
- Upgrades to the Customer Information System for seamless service delivery and billing enhancements. This is essential for Demand Charge Rate Structures, Time-of-Use billing, and feed-in-tariff reporting for distributed generation customers.
- Continuous improvements to the BEL 24-7 App, which has been well-received by Customers for its ease of access to utility services but requires enhancements to improve customer experience in areas of energy management, outage reporting and real-time restoration updates, and future integration with AMI for more personalized energy insights. This will also assist Customers on Demand Charge Rate structures to better manage their demand and maximize on the benefits of Time-of-Use Rates. By improving the BEL 24/7 App, Customers gain greater control over their energy usage, contributing to Belize's broader energy efficiency goals.
- Cybersecurity enhancements and business continuity measures, ensuring protection against evolving cyber threats.
- Energy Management Software, allowing for more precise grid optimization and demand-side management.

Additionally, BEL's expanding workforce necessitates a corresponding increase in laptops, tablets, and other digital tools to support modern work modalities, particularly as field staff engage more directly with Customers. These investments reflect BEL's strategic focus on leveraging technology to drive efficiency, enhance customer interactions, and build a more resilient and intelligent energy infrastructure.

Failure to invest in these IT&C programs will, among other things, expose BEL to cybersecurity vulnerabilities, increasing the risk of grid disruption, financial losses, and adverse impacts on Customers.

6.6 BEL's Ongoing Productivity/ Efficiency Initiatives & Cost Management

BEL continues to implement a strategic cost management program to optimize expenditures, improve asset utilization, and enhance grid reliability through digital transformation. These initiatives align with the PUC's regulations and support BEL's goal of maintaining stable electricity rates while funding critical infrastructure improvements.

Key initiatives include:

Grid Modernization & AMI-Enabled Customer Services

The rapidly evolving energy landscape has necessitated modern solutions to enhance grid reliability, improve customer service, and integrate renewable energy sources effectively. The adoption of Advanced Metering Infrastructure (AMI) represents an essential move toward achieving these objectives. By leveraging smart grid technology, BEL will enhance efficiency, reduce operational costs, and provide customers with greater benefits including insight on their consumption to inform their own energy use and planning for the future.

BEL has already made significant progress in expanding Advanced Metering Infrastructure (AMI) deployments, allowing for automated meter reading, real-time energy tracking, and enhanced load management capabilities. The nationwide rollout of AMI is part of a broader Grid Modernization Strategy and is the foundation of a smarter more resilient Grid. The AMI initiative builds on lessons learned from Pilot Projects implemented by BEL and aims to, among other objectives, enhance operational efficiency, improve billing efforts, empower customers and the Company with real-time energy usage data, and enable the integration of customer-oriented modern energy solutions.

AMI's as a Solution for Operations and Business Improvements

AMI rollout will contribute significantly to:

- **Management of Operational Costs:** AMI enables remote meter reading, accurate billing, and enhanced theft detection, reducing operational expenses.

- **Outage Management Capabilities:** AMI's real-time monitoring capabilities will improve fault detection and expedite response times far beyond existing capabilities.
- **Customer Engagement and Transparency:** AMI provides BEL with real-time insights, which can be used to support Customers to make better consumption decisions and increased energy efficiency leading to greater reliability.
- **Local Energy Injections and Grid Stability:** The increasing penetration of DG systems introduces new challenges for power system stability. AMI will assist in monitoring those energy flows at the Customer level, providing the necessary visibility to improve load balancing strategies.

Procurement Re-Engineering & Supply Chain Optimization

BEL is restructuring its procurement strategy to shift from a reactive operations support function to a strategic cost-reduction mechanism for more efficient material sourcing, enhanced supplier performance, and overall cost savings.

Through *Preferred Vendor Partnerships*, the Company is establishing a strategic supplier framework to lower procurement costs while ensuring consistent material quality. Additionally, BEL is expanding international supplier engagement to diversify sourcing and reduce dependency on single suppliers, mitigating supply chain risks.

To further optimize procurement, BEL is adopting a Total Cost of Ownership (TCO) model, shifting the focus from lowest upfront cost to lifetime value and reliability. This approach ensures long-term cost efficiency and minimizes maintenance expenses. Additionally, performance-based contracts are being introduced to improve supplier accountability, delivery timeliness, and overall equipment quality, reinforcing BEL's commitment to financial prudence and operational reliability.

Inventory Management Modernization

BEL is implementing a comprehensive inventory optimization program to enhance material forecasting, storage efficiency, and asset utilization. This initiative includes automated inventory tracking using RFID and barcode systems to improve accuracy and reduce manual errors, ensuring a more efficient and transparent inventory management process. Additionally, BEL is adopting just-in-time inventory models to minimize warehousing costs and optimize material turnover, preventing excess stock accumulation while maintaining operational readiness. Advanced analytics for demand forecasting will further ensure that stock levels are optimized to meet operational needs without unnecessary overstocking or shortages. These

improvements are expected to reduce inventory holding costs, enhancing financial efficiency while ensuring the timely availability of critical materials.

Digital Workplace Transformation & Workforce Productivity

In March 2024, BEL launched a New Workplace Policy & Digital Collaboration Program to modernize work environments, enhance workforce productivity, and improve service responsiveness. This initiative introduced a hybrid work model, allowing employees to work remotely or in flexible settings, increasing operational efficiency and adaptability. To support this transition, BEL deployed collaboration tools and cloud-based management systems, streamlining workflows and reducing administrative overhead costs. Additionally, process automation initiatives have helped to reduce manual administrative workloads, leading to greater productivity and improved service delivery.

Regulatory Asset Base

7 Regulatory Asset Base

7.1 Capital Investments

BEL five-year capital investment program is set to deliver \$395.8 MN in critical infrastructure expansion and improvements, aligning with the Company's long-term vision of building a modern, resilient, and sustainable energy services infrastructure. This substantial investment is a strategic step towards enhancing service reliability, optimizing energy management, and future-proofing the national grid. The capital investment program is broken down into Generation Expenditures, Supply (Transmission, Distribution & Delivery) Investments, and Non-Regulated Business Investments as follows:

Table 11: Capital Investment Costs Summary | 2025-2029

CAPITAL INVESTMENT PROJECTS	PROJECTED COSTS (\$'000)		
	2025-2029	2025	
		Priority 1	Priority 2
Generation & Battery Storage			
Utility-Scale Solar PV Interconnections Country-Wide	17,897	370	348.5
Battery Energy Storage Interconnection	4,473	0	855
Independence Interconnection for GT Plant	2,500	0	0
BEL-Owned Generation Upgrades/Overhauls	6,845	3,705	0
Dispatch & Generation Planning Software	7,401	0	1,942
Transmission System Expansion			
Caye Caulker Submarine Interconnection	13,036	13,036	0
San Pedro 2nd Submarine Interconnection from Mainland	300	0	100
Belize District Metropolitan Area Grid Upgrade	3,936	0	289.2
La Democracia-Dangriga 115 kV Interconnection	1,567	0	700
Engineering Studies	1,929	14	300
Transmission & Substations Upgrade			
Replacement of Transmission Structures	6,959	1,054	791
Substation Standardization & Upgrade/Redundancy	24,863	283	3,215
Distribution System Upgrade			
Belmopan Feeder #4 Separation	4,400	0	2,200
Placencia Submarine Replacement	3,574	374	0
Belize City Submarine Cable	1,900	0	0
Distribution System Reliability Improvement			
Standards & Safety	18,921	2,102	0

Reliability Improvement	18,246	2,020	340
Replacement of Rotten & Burnt Poles	15,399	1,540	0
Grid Modernization			
Smart Grid (Country-wide Rollout AMI)	45,196	15,065	0
Installation of Redundant Telecoms Infrastructure	5,305	0	0
Field Service Management System & GIS	2,976	0	726
DG & EV Programs	5,647	1,000	462
New Customer Connections			
Urban & Peri-Urban Electrification	43,091	2,644	1,887
Rural Electrification (Standard & Micro-Grid)	8,482	5,876	0
New & Replacement LED Street Lights	5,646	1,602	0
Information Technology & Cybersecurity			
OT System & Network Upgrade	13,550	0	624
Digital Work Environment	8,428	517	855
Business Continuity Projects and Programs	5,937	0	639.6135
Digital Customer Service	1,421	10	71
Facilities Expansion & Upgrade			
New Operations Headquarters - John Smith Road	9,092	0	1,010
Construction of New Independence Facility	2,151	0	0
Construction of Apartment Units in San Pedro	844	844	0
General Facilities Renovation	1,076	440	326
Operations Support			
Vehicles & Specialized Equipment – New/Upgrades	19,132	5,438	149
Other Projects	16,099	5,366	2,738
GEC & IDC	47,628	7,410	2,408
GRAND TOTAL	395,848	70,713	22,975

These investments will not only modernize the infrastructure but will also integrate cutting-edge, essential technologies. Key objectives of these investments include:

- Higher levels of supply reliability in the form of stable and uninterrupted electricity for consumers.
- Greater grid control automation, integrating Advanced Metering Infrastructure (AMI) and other smart technologies for real-time monitoring and predictive maintenance.
- Remote grid control capabilities, enabling faster fault detection, isolation, and system restoration.

- Infrastructure expansion and resilience, accommodating growing energy demand and mitigating the impact of extreme weather events.
- Integration of new generation sources, including renewable energy projects, to support sustainability goals and diversify the energy mix.

A. Major Infrastructure Projects

Utility-Scale Solar Projects

BEL has activated the recently amended Generation Procurement Regulations requesting that the PUC declare a generation emergency in Belize. Through this mechanism, BEL expects that it can bring 40 MW of utility-scale solar online within Q1 2026. The speed at which this is done will depend on the procurement method approved by the PUC.

The GOB estimates that the Saudi Solar Project to develop 60 MW of utility-scale Solar PV plants with funding (\$77M USD) from the Government of Saudi Arabia will come online between Q2 and Q3 2026. The first 20 MW plant will be developed near BEL's Maskall substation on land already purchased by BEL that will be on-sold to the GOB.

The GOB has also engaged the International Financial Corporation (IFC) to assist Belize in identifying Independent Power Producers to design, build, and operate utility-scale solar PV plants with a total capacity of 50-80 MW. Based on the work plan submitted by the IFC, these plants are expected to come online around Q3 2027.

BEL has repeatedly expressed concern about the capacity of the grid to accommodate high levels of solar penetration unless sufficient storage systems are in place.

Battery Energy Storage Solutions (BESS)

BEL recognizes the challenges associated with high levels of solar penetration, particularly the need for adequate energy storage solutions. This issue is being addressed through an integrated approach involving energy storage systems and grid modernization.

The World Bank/GOB BESS project has stalled over concerns about BEL's displacing a squatter on land earmarked for the San Pedro BESS. BEL will continue to work in cooperation with the GOB to install 60 MW of BESS in five locations countrywide, with the first instalment of 40 MW slated for the start of Q2 2026, in time to support the planned additions of intermittent solar power into the grid.

BESS will support grid stability, lower costs through energy arbitrage, assist with peak shaving, and help prevent grid collapse during system outages and emergencies.

Gas (LNG) Conversion

BEL is currently assessing the feasibility of converting its Westlake and San Pedro GTs to run on LNG as a medium-term solution to achieving least cost grid stability as intermittent renewables are brought online and as part of a wider GOB initiative to introduce natural gas into the local energy supply mix.

BEL and the GOB are currently engaged in discussions with a multinational company seeking to supply LNG into Belize, starting with converting Bapcol to run on LNG and to determine optimal supply amounts and capacity factors to make the investment viable.

Caye Caulker Submarine Interconnection

The submarine interconnection between Ambergris Caye and Caye Caulker is expected to be completed by the end of Q2 2025. The project experienced numerous delays since the feasibility study and environmental and social impact assessment were completed in December 2018.

The decision was made to revisit the load forecast and design after the island experienced an unexpected surge in demand at the start of January 2020 at the same time the front-end engineering design was scheduled to start. The reforecast confirmed that the projected load demand of Caye Caulker had doubled from 4 MVA to 8 MVA in 2020. The project scope and design concept were consequently revised to double the cable capacity, change the route of the submarine cable resulting in a longer length to avoid landing near the forest reserve at the northern tip of the island, building a full-fledged substation on the north island of Caye Caulker, and adjusting the feeder interconnection configuration. The project budget was consequently revised from \$17.3M to \$34.0M.

The submarine cable was delivered to Belize since early July 2023; however, numerous difficulties were encountered in procuring suitable contractors to lay the cable and to build the switching station and substation due to lack of interest and unresponsiveness of suppliers. Special waivers have had to be obtained from the Caribbean Development Bank (CDB) to negotiate directly with suppliers. The project is now scheduled to be completed by the end of Q2 2025. The total costs for the 2025-2029 plan is budgeted at \$13.0M.

Second Submarine Cable Interconnection between San Pedro and Grid

BEL is planning to install a second submarine cable between the mainland and San Pedro to bolster the capacity and reliability of power supply to serve burgeoning demand in both San Pedro and Caye Caulker. The capacity limit of the existing interconnection is expected to be breached within the next two years given the recent spikes in demand due to heatwave impacts on top of high organic growth. Moreover, the interconnection with Caye Caulker will be completed by the end of Q2 2025 adding Caye Caulker's demand to the overall load on the interconnection.

The new cable is expected to be rated at 69 KV or 115 KV with sufficient capacity to serve the power supply needs of San Pedro, Caye Caulker, and the islands further to the south of Caye Caulker, including Caye Chapel, Long Caye, and even St. George's Caye. Preliminary investigations have determined that the most feasible route for the new cable is near the route of the existing cable but terminating along the northern half of San Pedro where there are currently higher levels of and therefore more potential for tourism and commercial growth.

The cost of the project is estimated at \$120.0M and is scheduled for completion after 2029. The feasibility study has been completed. Grant funding from CDB is currently being sought to conduct the engineering study in 2025.

Magazine Road Substation Upgrade and Belize City Feeder Expansion

The major portion of the Belize City demand is supplied at 6.6 kV from the Magazine Road 115/6.6 kV substation. The substation connects to aged switchgear housed in the old power station building that supplies six feeders (3 covering the northside and 3 covering the south side).

The substation is currently being upgraded to incorporate new indoor switchgear being built on the substation compound with provisions for eight outgoing feeders. It also provides for the installation of four regulator banks (each supporting two feeders) to replace the existing two regulator banks. This project is well underway; all long lead equipment has been delivered awaiting completion of the civil works and the switchgear housing; and it is expected to be completed by the end of Q2 2025.

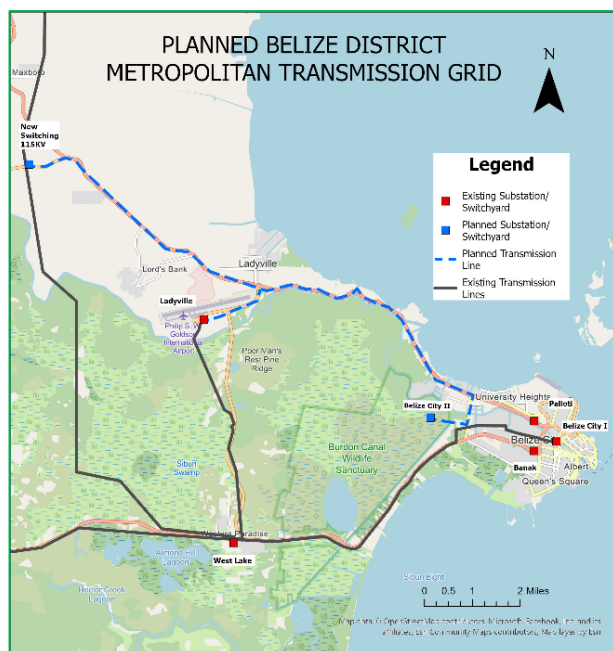
Additionally, two new feeders are being carved out from portions of existing feeders in Belize City to reduce feeder loads below 3 MW: a new Feeder #7 from portions of Belize City Feeder #3 and Feeder #5, and a new Feeder #8 from portions of Belize City Feeder

#2 and Feeder #4. These are scheduled to be commissioned within Q1 2025 and will further improve reliability of supply in the distribution system.

Belize District Metropolitan Area Grid Upgrade

The Belize City peak demand on the 6.6 kV distribution system is projected to exceed the capacity of the Magazine Road substation by 2025. Moreover, the substation is supplied from a single 115 kV transmission feed from Westlake (Mile 8 George Price Highway).

BEL plans to set up a new 115/22 kV substation (“Belize City II/Lake I”) to be fed from a new switching station to be located along the 10L transmission line between Maskall and Westlake (“North Ladyville Switching Station”). This substation will replace the temporary substation that was built in Belize City west of Chetumal St (in 2023) to facilitate the upgrade of the Magazine Road substation by providing an alternate supply route to the Belize City 6.6 kV system through the Pallotti and Banak substations. It will also take up the 22 kV load along the George Price Highway up to Westlake where most of the load growth in Belize City is occurring.



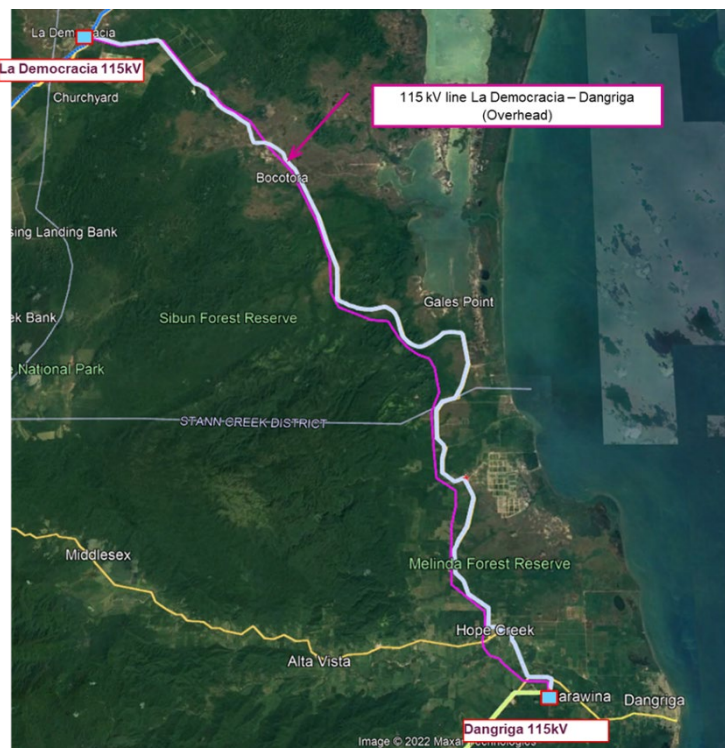
The entire project consists of the new Lake I 115/22 kV substation described above plus a new North Ladyville 115 kV switching station along the Maskall-Westlake transmission line segment and a new 115 kV transmission line segment connecting the North Ladyville switching station to the new Lake I substation, with the possibility of underground portions through certain areas. The estimated cost of the project is \$39.6M. Grant funding from CDB is being sought to conduct the engineering study in 2025.

New La Democracia-Dangriga 115 kV Interconnection

The 69 kV transmission line from La Democracia to Dangriga is the critical link between the transmission grid and the southern zone of the country. Any outage that affects this link isolates all three southern service areas (Dangriga, Punta Gorda, and Independence, which includes the major tourist destination of Placencia), as well as

the Bapcol power plant and the Hydro Maya hydroelectric plant. However, this line has had a relatively poor reliability performance over the past decade, which has severely impacted the Company's reputation and resulted in many commercial and tourism Customers having to make major investments in backup generation and protective equipment. This link will become even more critical with the planned transfer of the mobile GT to Independence between 2026 and 2027 and other gas generation capacity additions being considered by the GOB.

BEL plans to build a new 115 kV overhead transmission line from La Democracia to Dangriga to improve system reliability and transfer capacity to/from the southern part of the transmission system. The line is expected to have a total length of about 35 to 39 miles depending on the actual ROW obtained and to generally follow the Coastal Plain Highway out of La Democracia until Hope Creek where it will remain to the west of the Hummingbird Highway until it reaches the Dangriga Substation. The Dangriga substation will be upgraded to ring bus configuration on the 69 kV side to accommodate the new circuit.



The total project cost is estimated at \$35.6M. Grant funding is being sought from CDB to conduct the feasibility study in 2025.

Placencia Submarine Cable Replacement

The Placencia peninsula is the most significant tourist destination in southern Belize with a 2023 heatwave-driven peak demand of 5.15 MW (5.58 MVA) and a pre-heatwave demand of 3.5 MW. The load is forecasted to reach 8.4 MVA in the next 15 years. Power is supplied to the area from Independence Feeder #2 via two submarine cables that span the Placencia Lagoon: one further north ("Surfside"), rated at 9.7

MVA, and operating at 22 kV; and the other installed 32 years ago near Malacate Beach (“Malacate”), rated at 1.2 MVA, and operating at 6.6 kV.

The Placencia Submarine Cable Replacement project involves substantially increasing the transfer capacity of the Malacate interconnection to at least 8.5 MVA and the upgrading of the operating voltage level from 6.6 kV to 22 kV. This will automatically provide full redundancy between the two circuits.

The first phase of this project will involve converting the 6.6kV portion of Independence Feeder #2 to 22KV and increasing the feeder capacity by reconductoring the primary voltage lines with larger conductors and replacing the existing transformers with more modern and efficient ones rated for 22 kV operation.

The second phase will involve replacing the existing submarine cable at Malacate with a high capacity 25KV 500 MCM submarine cable Installation; installing reclosers to enhance the system's reliability by automatically restoring power after a fault and minimizing service interruptions; and adding voltage regulators to the system to improve power quality and ensure that voltage levels remain within acceptable ranges.

The project cost is estimated at \$3.654M and the entire upgrade is scheduled to be completed by the end of 2025.

Belmopan Substation and Transmission Upgrade

The Belmopan substation serves the capital city of Belmopan and sits along the central trunk of the BEL grid. It is currently supplied by a single 115kV circuit originating from the Camalote switching station approximately 2.2 miles away. The substation consists of a single 115/22 kV transformer, which connects to a 22 kV bus. A single 22/11 kV transformer taps off the 22 kV bus and supplies the 11 kV distribution system which serves the central area of Belmopan, including the offices of the Government of Belize. Three other feeders originate directly from the 22 kV bus and serve the other parts of the city and rural areas in the Cayo District.

Both the single circuit from Camalote and the substation transformers are critical N-0 vulnerabilities for the supply: the loss of the 115 kV circuit or the 115/22 kV transformer will result in a total service area outage, and the loss of the 22/11 kV transformer will result in a total outage in all of central Belmopan. The 11 kV system will not be expanded, and all new system extensions will be supplied by the 22 kV

system. The 11 kV is projected to reach a peak demand of 7.6 MW by 2042 from its current 6.3 MW due to EV and vegetative load growth among existing Customers, and the balance of the load will be supplied by the 22 kV distribution system.

Following the recommendations of the LCEP, BEL plans to upgrade the 115 kV circuit and the Belmopan substation as follows:

1. Re-routing the transmission line between La Democracia and Camalote by adding 2 miles of new 115 kV transmission line from Cotton Tree to the Belmopan substation and adding a breaker at the Belmopan substation. The substation will now be fed from two separate segments of the central trunk of the 115 kV system: from the East through Democracia and from the West through Camalote. This will provide increased grid reliability and resilience against faults on 115kV system.
2. Reconfiguring the substation 115 kV bus bar as a ring bus, which improves reliability and operational flexibility.
3. Adding a second 115/22 kV transformer to increase supply capacity and achieve N-1 reliability at the 22 kV system level and adding a second 115/11 kV transformer to achieve N-1 reliability in the 11 kV system, which supplies the administrative offices of the GOB and the central areas of Belmopan city.

The project is expected to be completed by the end of 2026.

Belmopan Feeder #4 Separation into Three Feeders

The current Belmopan Feeder #4, which covers the largest geographical area in the country, will be divided into three new feeders. Each feeder will have upgraded capacity to carry the load of the others, ensuring N-1 reliability. The feeders will have multiple tie-points, allowing load sharing between Dangriga, San Ignacio, and rural Belize District. This interconnected design will optimize grid reliability and efficiency.

This project is expected to be completed within Q2 2025.

Rural Electrification & Micro-Grids

BEL's rural electrification efforts over the next two years will be focused on supporting GOB's objectives to supply electricity to villages in the north and south of the country, co-financed with grant funding from the EU.

BEL is the implementing partner in extending distribution lines to Indian Church and San Carlos in the Orange Walk District and setting up micro-grids in Jalacte, San

Vicente, and San Benito Poite in the Toledo District over the period 2024 to 2025. This project will bring electricity to 548 households in these villages and an additional 18 households between San Felipe and Indian Church and includes the installation of streetlights as well as smart meters for all connections.

The original project was conceived to build five (5) micro-grids in the five (5) villages, but had to be reformulated as a combination of line extensions in the north and micro-grids in the south because inflation, especially in the cost of batteries, increased the project cost. Line extensions to the villages in the north are substantially less costly than micro-grids and capture additional loads, which include farms, irrigation plants, and resorts. Moreover, the area to be electrified between San Felipe and Indian Church is the country's largest producer of carrots and tomatoes, in addition to producing other vegetables. Further load growth is expected as GOB is investing in a vegetable and fruit packing plant along the route of the line extensions and local farmers have also expressed an interest in obtaining additional refrigerated containers. The current project formulation therefore meets the objectives of the original EU proposal, while supplying additional demand between San Felipe and Indian Church and significantly supporting the country's agricultural sector.

B. Grid ReLiability & Resilience Improvement Projects & Programs

Substation Standardization and Redundancy

The Company intends to undertake various investments as recommended by the LCEP that are necessary (i) to upgrade substation configurations to provide the space required to carry out maintenance without having to isolate the entire substation, (ii) to prevent overloading of existing transformers, and (iii) to provide firm capacity (N-1 security) at the substations in case of the loss of a single transformer.

Substation Standardization

Substations at Santander, San Pedro, Corozal, Orange Walk will be upgraded to code: replacing wooden poles with more resilient steel structures and adding new feeders, reclosers, and switches and reconfiguring for greater flexibility to minimize outage impacts during maintenance/faults.

Substation N-1 Redundancy

Additional transformers will be installed at Belmopan, San Ignacio, Corozal, Chan Chen, Orange Walk, Belcogen, and Independence reducing vulnerability to significant load-shedding or extended power interruptions associated with outage events characteristic of the current radial transmission system design.

Substation Relay Upgrade

Relays will be upgraded at nine substations (Maskall, West Lake, Camalote, Punta Gorda, Savannah, Dangriga, San Ignacio, and BAL). The upgraded (SEL-411L) relays allow for fast response signals to software used in disturbance monitoring, expediting root cause analysis with high resolution time-series data.

ERCAP (Energy Resilience for Climate Adaptation Project)

The Energy Resilience for Climate Adaptation Project (ERCAP) continues to bolster the power sector's ability to withstand adverse weather and climate change impacts through demonstrated solutions in specific areas. The project includes storm recovery planning, backup control centers, and new fiber-reinforced transmission lines to enhance overall system reliability.

Bolstering the Telecommunications Infrastructure

The critical telecommunications network infrastructure underpinning the Company's data, voice, and digital media communication will be upgraded by implementing UHF links at critical hub points across the infrastructure as a redundant communication medium to the existing fibre network. This is being done to address reliability issues (caused by storms, vehicle accidents, and even sabotage) that have plagued the network over recent years, as well as security-related concerns, particularly ensuring that footage from security cameras remains accessible when disruptions occur.

The project is scheduled to be completed by 2026 at an estimated cost of \$5.3M.

LED Street Lighting

In 2016, BEL embarked on a project to replace approximately 35,000 existing high-pressure sodium (HPS) and mercury vapor (MV) lighting fixtures with more efficient LED fixtures. This project was intended to significantly reduce GOB's public lighting energy consumption and channel the savings towards the installation of additional fixtures on roadways and for improved lighting, visibility and security.

At the end of 2024, 42% of the fixtures were replaced. The aim is to replace the remaining fixtures by the end of Q1 2025.

New Vehicles

BEL is committed to ensuring that its fleet of utility trucks and vehicles are optimally maintained for the effective execution of daily operation, maintenance and construction works. In line with best practice and the recommendations of a previous

study, a maximum age of 12 years for heavy duty trucks and 6 years for light duty vehicles has been adopted to best optimize fleet operation, minimize down-time, and manage maintenance costs.

Of the Company's current fleet, 13 heavy duty vehicles are beyond these prescribed limits, and have been scheduled for replacement over the course of the 5-year business planning period. The Company is further committed to replacing as much of its pickups and vans used for transportation of employees and light loads with electric alternatives as soon as practicable within the next five years. This initiative aligns with its strategy to establish BEL as a visible industry leader, signalling confidence in both the product and market. The total cost for the replacement and upgrade of vehicles and specialized equipment over the 2025-2029 plan is budgeted at \$19.1M.

C. Grid Modernization

BEL's electric grid as it exists was designed for delivery of electricity to Customers in one direction, from centralized generation sources through transmission lines and substations to Customers on distribution feeders. Today, the onset of technologies such as distributed energy resources, battery storage and renewable energy sources coupled with increased Customer demands and expectations for reliable power supply and participative autonomy have radically changed the nature of the power system.

The modern "smart" grid must now be able to accommodate two-way power flow, with countless variable sources of electricity at the distribution level, and constantly changing balances between generation and demand, using advanced distribution technology and communication systems to achieve better real-time visibility and control of the power network. Without these innovations, System Control Center dispatch operators will have no chance of being able to properly manage the safe and reliable operation of the grid and delivery of electricity to Customers.

AMI/Smart Grid

AMI (Advanced Metering Infrastructure) is an integral part of BEL's strategy to modernize its distribution grid into a smart grid. The expected benefits include automation, innovation, and significant process improvements in meter reading and revenue protection, application of time-of-use tariffs and pre-paid metering, outage management and response, demand response and home automation, voltage and power quality monitoring, and capacity planning.

Importantly, as the backbone of the smart grid, AMI will be critical for the visibility and control that will be needed to support the accommodation of rooftop solar and distributed generation, enabling two-way communication between utility and meter or other end device, providing real-time data on system operation down to the Customer level.

A contract was signed with vendor, Landis & Gear, at the end of 2023 to supply an integrated AMI solution consisting of smart meters, a wireless communication infrastructure, a head-end, and supporting data management systems. The project commenced in Q3 2024 and will replace 110,000 meters countrywide with smart meters capable of two-way communication at an estimated cost of \$45.2M to be spent over the 2025-2029 plan horizon. The first phase of the project involves installation of the supporting infrastructure and deployment of 30,000 smart meters in Belize City, San Pedro, and Placencia by April 2025. The project is being fully financing by the Caribbean Development Bank (CDB).

Distribution Grid Automation

Existing switching devices on the distribution system will be motorized and/or replaced with reclosers to enable remote control and automatic operation. Additional reclosers, fault indicators and switching devices enabled with remote communication will also be installed to improve visualization and connectivity. Voltage regulators and capacitor banks will also be outfitted with upgraded controllers for additional metering and control capabilities, ultimately facilitating the expansion of BEL's SCADA system for monitoring, automation, and control on the distribution network.

Network Redundancies

Several projects will be implemented, mainly in the Belize City and Belmopan service areas, for the extension of feeders to provide interconnection opportunities and redundancies in the distribution network within existing service area networks and between contiguous service area networks. This will support future efforts to establish automatic fault isolation and restoration schemes as a key part of system reliability improvement in urban areas.

Grid Sensing & Transformer Monitoring

Grid sensors and distribution transformer monitors will be deployed across the distribution system for real-time monitoring, providing complete visibility of feeders, and improved ability to locate faults, manage losses, and monitor power quality.

GIS and Field Management Services

BEL's GIS system is being upgraded to track and manage the performance of the distribution system. This will be paired with mobile workforce tools, allowing technicians to access critical data and conduct real-time inspections, improving both service and operational efficiency. The total cost of the upgrade over the 2025-2029 plan is budgeted at \$2.98M

7.2 Investment Recovery

Financial theory asserts that for an investment to be worthwhile, the expected return must exceed the cost of capital. If the authorized rate of return (ROR) is set below the weighted average cost of capital (WACC), it signals that the utility cannot generate sufficient returns to cover its cost of capital, leading investors to seek opportunities elsewhere. This misalignment can hinder the utility's ability to raise funds for necessary infrastructure investments, ultimately impacting service reliability and customer satisfaction.

For the 2020 Full Tariff Period (FTP), the PUC established a target rate of return of 10%, with a minimum guarantee of 8% and a maximum cap of 12%. However, during Annual Rate Proceedings (ARP), the PUC revised BEL's target rate of return downward to:

- 8% for the 2022–2023 Annual Tariff Period (ATP)
- 8.5% for the 2023–2024 ATP
- 8% for FTP 2024-2028

The PUC justified these adjustments by stating that BEL was in a healthy financial position and that the changes did not deprive the Company of its ability to earn a reasonable return, as per the Electricity Act (PUC Initial Decision, 2022 ARP)

Table 12: Average Historical Return on Equity

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024
Income	27,292	17,773	- 3,587	2,997	46,661	34,284	15,343	6,981	- 6,974
Equity	361,947	360,541	350,724	343,527	363,011	384,055	387,782	392,148	388,839
ROE	7.5%	4.9%	-1.0%	0.9%	12.9%	8.9%	4.0%	1.8%	-1.8%

Cost of Debt Trends and Projections

Historically, BEL's average effective interest rate has remained around 5.5%, supported by a conservative borrowing strategy that relied on retained earnings and minimal external financing in a low-interest rate environment. However, the

company's financial position has weakened due to higher COP and stagnant electricity rates, leading to deterioration in cash reserves and net income.

To address working capital shortfalls and fund necessary infrastructure investments, BEL has shifted its borrowing strategy, securing both short-term loans for liquidity needs and long-term financing to expand generation and distribution capacity. This increased reliance on external financing has heightened BEL's financial risk profile, resulting in higher borrowing costs and a direct impact on the company's WACC.

Since the regulated return on investment is benchmarked against WACC, additional borrowing places upward pressure on the cost of capital, potentially affecting BEL's ability to earn a fair return on its regulated asset base. Given that these borrowing needs stem from cash flow constraints caused by stagnant rates, BEL urges the PUC to closely monitor the approved return rate, ensuring that it remains aligned with the increased financial risk and capital costs associated with additional borrowing.

Challenges to Achieving Reasonable Returns

Despite regulatory provisions, BEL's realized return on equity (ROE) has been significantly below expected levels, primarily due to:

1. *Earnings Deferrals* – A significant portion of earnings has been deferred into the regulatory account balance, limiting shareholder returns.
2. *Understated Operating Expense Allowances* – Certain operational costs have not been adequately accounted for in the electricity rates, affecting overall profitability (See Section on *Operating Expenditures* above).

BEL contends that the PUC's target rate of 8.0% for the 2024–2028 FTRP is reasonable only if the approved level of operating expenses is increased in line with BEL's 2024 actuals and forecasted figures. Failing this adjustment, the target return on investment should be reset to 10% for this ARP to compensate for revenue shortfalls due to understated OPEX allowances.

7.3 Objections to Performance Penalties and Erosion of Shareholder Returns

Furthermore, BEL strongly objects to any performance penalties in the form of a reduced rate of return for project implementation delays. Such penalties are inconsistent with sound principles of performance-based regulation and further undermine shareholders' ability to earn a fair and reasonable return as guaranteed by law.

BEL's Proposal

To ensure a sustainable and financially stable electricity sector, the regulatory framework must:

- Reassess the target return on investment, ensuring that it supports both the financial health of BEL and the long-term reliability and affordability of electricity services for Customers by aligning the authorized rate of return with projected WACC to maintain investor confidence and the utility's ability to raise capital at competitive rates.
- Increase operating expense allowances in electricity rates to reflect actual costs incurred by BEL or as a fixed percentage of assets in service.
- Avoid performance-based penalties that erode financial stability, particularly when delays in project implementation are due to external factors beyond the Company's control.
- Provide specific and detailed guidance on the justification that is to be given for projects for different levels of expenditure. BEL intends to recommend such a guidance framework to the PUC for its consideration.

By adopting these measures, BEL and the PUC can work toward a balanced regulatory environment that supports investment, maintains service quality, and safeguards financial sustainability for the future.

Regulatory Account Balance

8 Regulatory Account Balance

The Regulated Account Balance (RAB) is a running balance of the difference between the revenues BEL is allowed to collect from consumers to cover its reasonable costs of providing electricity (the “Approved Revenues” or “Revenue Requirement”) and the revenues that was actually collected by BEL from consumers (the “Actual Revenues”).

Historically, the PUC trues up this difference at the end of every four-year FTP and makes a correction to the rates for the next FTP to allow for recovery of the difference to BEL or reimbursement to consumers within the next FTP depending on whether BEL under-collected or over-collected during the past FTP.

8.1 RAB as of June 30, 2024

In its Final Decision on FTRP 2024, the PUC assessed the RAB at the close of FTP 2020|2024 as \$27.73 MN in favour of BEL, comprised of corrections in the sum of \$4.34 MN and \$23.38 MN in favour of BEL for ATP 2022|2023 and ATP 2023|2024 respectively. This assessment, however, significantly undervalues the Company’s actual position. BEL’s own calculations for RAB as at that date was \$94.76 MN cumulatively.

The PUC’s Final Decision on FTRP 2024 included a forecast for corrections for ATP 2023|2024 which grossly understated cost of power for the period by \$42.95 MN. However, corrections for that period were not yet due until this current ARP and must be reconsidered now by the PUC as set out in *Schedule 1* of this submission.

BEL also maintains that the PUC’s RAB is further understated by \$15.4 MN representing the cumulative sum of the Caye Caulker performance penalty that the PUC has imposed on BEL without due cause or authorization under the law. As the PUC has refused to revisit this decision within any ARP, the Company will pursue administrative review of the decision with the High Court of Belize to have this sum registered in the RAB.

8.2 RAB as of June 30, 2025

At the end of this ARP, the PUC will issue a Final Decision that will update the RAB as of June 30, 2025. As mentioned, during FTRP 2024, the PUC previously forecasted the corrections due for ATP 2023|2024 but must now update this assessment to account for actual results. All things being equal, the PUC should approve \$65.56 MN in corrections in favour of BEL for ATP 2023|2024 which would bring their approved RAB

to \$69.91 MN as of June 30, 2025, to be collected over the remainder of the FTP – July 1, 2025, through to June 23, 2028.

If BEL is successful in securing a judgement from the High Court, reversing the Caye Caulker penalty, then the PUC-approved RAB would increase by \$15.41 MN to \$85.32 MN as of June 30, 2025, to be recovered over the remainder of the FTP.

Regulated Account Balance	PUC Balance	BEL Balance
ATP 2022 2023	4,345,520	4,345,520
ATP 2023 2024	65,562,580	65,562,580
CCK Penalty	-	15,414,102
As of June 30, 2025	69,908,100	85,322,202
FTP 2024 Corrections	7,013,810	38,686,004
As of June 30, 2028	76,921,910	124,008,205

BEL further estimates that the FTP at its proposed rates will generate \$43.03 MN in corrections in favour of the Company increasing the RAB at the end of the period to \$128.35 MN. This figure is reflective of an increase in the average price from \$0.40 per kWh to \$0.43 per kWh with effect from January 1, 2026, as well as the inclusion of higher-than-approved OPEX. The Company is resubmitting its case for an increase in its OPEX allowance by \$30.78 MN over the FTP than currently approved by the PUC.

8.3 Strategy for RAB Recovery

The below table presents pricing scenarios in which the mean electricity rate is increased by 1 cent increments from the current 40 cents per kWh with effect from January 1, 2026, through to the remainder of the FTP. The revenue requirement here reflects BEL's claim for operating expenses – as distinct from the PUC's approved allowance – as well as the assumption of reversal and recovery of the \$15.41 MN Caye Caulker performance penalty.

BEL's base case business plan, and by extension the Company's rate case submission, is for the partial recovery of the RAB within this FTP through a modest rate increase of 3 cents per kWh from the current approved MER.

\$'000	2024 2025	2025 2026	2026 2027	2027 2028	Totals
Sales (kWh)	730,193	775,830	822,502	866,660	3,195,185
TBR (RR)	300,133	371,241	380,743	400,601	1,452,718
RAB Scenarios					
0.40	7,325	60,133	50,920	53,070	186,863
0.41	7,325	56,177	42,695	44,404	166,015

0.42	7,325	52,220	34,470	35,737	145,167
0.43	7,325	48,263	26,245	27,070	124,318
0.44	7,325	44,307	18,020	18,404	103,470
0.45	7,325	40,350	9,795	9,737	82,622

Alternatively, if the Company is not successful in securing a court order to reverse the Caye Caulker Penalty and if the PUC denies BEL's claim for a more cost-reflective OPEX allowance, then the RAB, all other things being equal, would be reduced to \$77.23 MN at the end of the FTP using the modest 3 cent rate increase.

	2024 2025	2025 2026	2026 2027	2027 2028	Totals
Sales (kWh)	730,193	775,830	822,502	866,660	3,195,185
TBR (RR)	296,972	363,371	370,825	389,878	1,421,046
RAB Scenarios					
0.40	4,164	52,264	41,001	42,348	139,777
0.41	4,164	48,307	32,776	33,681	118,929
0.42	4,164	44,350	24,551	25,015	98,080
0.43	4,164	40,394	16,326	16,348	77,232
0.44	4,164	36,437	8,101	7,681	56,384
0.45	4,164	32,480	-124	-985	35,535

At present, BEL is seeking an increase in effective tariffs to Customers to collect revenues at an average price of \$0.43 per kWh as a minimum. However, at this rate, BEL will not be recovering its full cost and may be constrained in its ability to purchase energy in peak periods when energy imports from Mexico are scarce and/or extremely costly as happened in the first half of 2024. The Company firmly believes that the introduction of further versions of the time-of-use (TOU) pricing, a proven strategy in other advanced regulatory jurisdictions to optimize cost recovery and demand side management, can be beneficial in helping to manage cost of power by incentivizing demand-side management.

Currently, Customers may opt into the Demand Charge Rate and benefit from the simple TOU rates for peak and off-peak periods. BEL proposes the introduction of day-ahead or two-day ahead hourly pricing for large commercial and industrial Customers, enabling:

- Customers to shift their demand in response to price signals and/or
- Higher-demand customers with greater ability and willingness (and capacity) to pay to access premium-priced electricity during peak periods where the cost of energy is above that which is reflected/provided for in the mean electricity rate.

This can help shift exceptional cost of power from the volume-based Customers to the more energy intensive Customers with capacity to pay for higher cost power.

- Improved revenue recovery, ensuring that extreme COP spikes are absorbed by high-consumption users rather than all Customers. This would also support of a more tractable RAB.

This shift will provide a more sustainable and cost-reflective pricing model, supporting RAB recovery while ensuring fairness across Customer Classes. BEL's submission sets out its case for a comprehensive framework and more cost-reflective pricing model as well as its high-level presentation of the expanded TOU concept.

Time Of Use and Demand Charge

9 Time Of Use and Demand Charge

The Role of Cost Reflective Pricing

Cost-of-service pricing is a fundamental principle in modern electricity regulation, ensuring that electricity rates reflect the actual costs incurred to provide reliable service. Traditionally, this approach has been applied to individual or large industrial customers with unique service needs. More broadly, utilities categorize customers into residential, commercial, and industrial classes to ensure pricing aligns with the cost of serving each group. Now, leading utilities have adopted a more comprehensive approach, aligning pricing with actual service costs and minimizing inefficiencies.

While BEL's current rate structure differentiates between customer classes, it does not fully reflect the actual cost of service, leading to cross-subsidization—where some customers pay less than their fair share while others bear an undue burden. This misalignment introduces a revenue risk and limits BEL's ability to recover costs equitably. The introduction of cost-reflective pricing mechanisms, such as Time-of-Use (TOU) and Demand Charges, is necessary to correct these imbalances, improve revenue stability, and align rates with cost drivers. These adjustments are intended to:

- Correct pricing imbalances and ensure financial sustainability.
- Enhance revenue stability by aligning rates with cost drivers.
- Provide transparent signals to Customers to incentivize more efficient energy use.

Background

Starting with its April 2022 ARP submission through to its last 2024 FTRP submission, BEL has formally proposed to the PUC the implementation of a new pricing scheme, consisting of:

- Peak and off-peak variable energy charges that reflect average real-time system costs.
- A fixed demand charge to fairly allocate capacity costs among users.
- A feed-in tariff (FIT) to cater for Customers wishing to connect their DG installations in parallel with their grid service under equitable pricing terms.

This was deemed as a critical step toward modernizing Belize's electricity pricing model, aligning electricity rates with actual costs to ensure full grid service cost recovery, and supporting renewable energy integration.

In response, the PUC mandated the introduction of a Demand Charge Rate Regulatory Sandbox pilot in 2024. This initiative allows testing of the new pricing mechanisms proposed by BEL.

Implementation Progress

- *DG Customer Integration:* In 2024, 78 grid-tied DG consumers were interconnected to the grid, with bidirectional meters deployed to capture demand and feed-in data.
- *Partial Rate Rollout:* The FIT component has been implemented, providing credit notes for validated feed-in energy.
- *Process Development:* Internal tools, interconnection standards, and Customer engagement materials have been established to support the rollout.

Challenges and Regional Lessons

Stakeholder feedback has revealed resistance to the demand charge, echoing experiences in Jamaica and Barbados, where phased implementations were critical for customer adaptation. These experiences underscore the importance of proactive communication and structured implementation strategies.

Proposed Pathway to Full Cost Recovery

- **Phased Implementation:** Introduce the Demand Charge in intervals, allowing Customers to adjust and providing opportunities for feedback and improvements.
- **Enhanced Customer Communication:** Develop targeted outreach to demonstrate potential Customer savings and address misconceptions about the new rate structure.
- **Stakeholder Engagement:** Collaborate with the PUC to align sandbox findings with policy objectives, ensuring the rate structure supports grid sustainability.

Strategic Path Forward

The introduction of TOU and Demand Charge pricing is an important step in modernizing Belize's electricity sector. By balancing renewable energy incentives with grid service cost recovery, BEL can:

- Ensure financial sustainability while supporting the transition to a modern, decarbonized energy system.
- Strengthen market responsiveness to evolving grid conditions.
- Establish a robust foundation for future regulatory enhancements consistent with national development.

The phased rollout and ongoing data-driven adjustments will reinforce BEL's position as a forward-thinking utility, responsive to both market dynamics and Customer needs.

Introduction of Real Time Pricing (RTP) Mechanisms

BEL recognizes that evolving electricity consumption patterns, increasing demand side pressures, and emerging digital capabilities present a critical opportunity to modernize the rate structure in ways that further enhance equity, efficiency, and customer empowerment.

To this end, BEL urges the PUC to consider the introduction of dynamic TOU pricing: a forward-looking pricing mechanism whereby applicable Customers would receive time-varying price signals days in advance. These signals would enable Customers to better plan and adjust their energy usage in accordance with actual system costs and constraints, thus fostering greater participation in system efficiency and demand-side management. This concept draws on international best practice, including BEL's own experience with CFE.

Evolution from Simple TOU rates to RTP

Currently, BEL applies a simple TOU structure for specific customer categories—namely, Industrial and Demand Rate Charge Customers - and has also proposed the introduction of peak and off-peak energy charges. While this model represents a foundational step toward cost-reflective pricing, it does not capture the full potential of dynamic price responsiveness, especially in a grid increasingly influenced by load constraints.

BEL envisions a more granular, responsive and data-driven TOU mechanism—one that reflects real-time system conditions and allows Customers to make informed consumption decisions that benefit both the grid and their energy costs. Such dynamic pricing would be initially considered for larger customer classes (e.g., Commercial 2 and Industrial 2), subject to further research, pricing studies, and stakeholder engagement.

The Enabling Role of Advanced Metering Infrastructure (AMI)

The success of Real-time TOU pricing is linked to the deployment of AMI. To date, BEL has procured approximately 31,500 smart meters as part of its strategic investment in grid modernization. This investment lays the groundwork for dynamic pricing capabilities and more sophisticated customer engagement strategies.

Policy Alignment and Social Considerations

BEL is committed to ensuring that any transition toward more dynamic pricing structures is guided by the principles of cost reflectivity, equity, and social policy alignment. To this end, the proposed mechanism will be supported by comprehensive pricing analyses and impact assessments, including customer segmentation and affordability studies. These will inform eligibility criteria, rate design, and communication strategies to ensure that no Customer is disadvantaged by the implementation of dynamic TOU.

BEL is currently conducting further research, stakeholder consultations, and regulatory engagement prior to formal application for implementation, which it expects to make to the PUC by mid-year. Importantly, BEL, at this time, is seeking the PUC's acknowledgement of this principle as an essential element in the evolution of the national electricity rate framework.

The Role of TOU and Demand Charge Pricing

The successful implementation of this tariff structure is critical for ensuring that pricing reflects actual system costs. Without TOU pricing and Demand Charges, large consumers with high but intermittent loads disproportionately benefit from grid capacity while other customers subsidize their demand. TOU pricing and demand-based rates help:

- Align prices with cost drivers, ensuring fair cost recovery.
- Encourage load shifting, reducing system stress during peak hours.
- Prevent DG customers from over-relying on the grid without contributing fairly to its upkeep.

To safeguard long-term grid stability and ensure equitable cost recovery, BEL urges the continued enforcement and refinement of this tariff structure, as it ensures full cost recovery while preventing cross-subsidization between customer classes. These measures will prevent cross-subsidization while positioning Belize's electricity sector for a more efficient and resilient future.

ARP Schedules

10 ARP Schedules

SCHEDULE 1

Belize Electricity Limited (BEL)

ANNUAL CORRECTIONS - JULY 1, 2023 - JUNE 30, 2024

General Corrections - July 1, 2023- June 30, 2024

Approved Tariff Basket Revenue - \$:	343,188,378
Realized Tariff Basket Revenue - \$:	277,625,797
Variance (Total Approved less Total Realize) - \$:	65,562,580
Prior Period Corrections Outstanding - \$:	4,345,520
Regulatory Account Balance - \$	69,908,100

Note that while the RAB of \$69.9 MN is understated by \$15.41 MN being the Caye Caulker performance penalty imposed by the PUC which is subject to legal challenge and will be added to the RAB once BEL has secured a decision for the reversal.

SCHEDULE 2

Belize Electricity Limited (BEL)

RATE REVIEW FOR FTRP 2024|2028

Approved Regulated Asset Value (RAV) for Full Tariff Period (FTP) July 1, 2024 to June 30, 2028

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

Year	2023	2024	2025	2026	2027	2028
Starting RAV	404,060,182	432,987,419	436,817,050	534,324,013	539,162,547	589,874,744
Depreciation	19,948,374	22,773,778	26,680,595	27,524,014	29,396,925	31,337,019
Work In Progress	86,902,687	92,893,220	85,425,683	81,190,889	75,901,094	77,987,684
Additions	83,839,555	154,810,246	98,654,760	93,277,528	71,188,334	65,780,911
Net						
Contributed Capital	1,168,631	(732,401)	(1,967,216)	4,157,290	1,168,630	(4,496,909)
Ending RAV	432,987,419	436,817,050	534,324,013	539,162,547	589,874,744	630,510,719

SCHEDULE 3
Belize Electricity Limited (BEL)

Rate Review for FTP 2024 | 2028

Updated Cost of Power (COP) Parameters and Demand for Full Tariff Period (FTP) July 1, 2024 to June 30, 2028

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

Year	2024 2025	2025 2026	2026 2027	2027 2028
KWHrs Purchased and Generated	825,311,931	888,231,305	938,427,318	987,285,300
Reference Cost of Power - \$	195,891,553	226,398,686	231,838,152	243,851,405
Approved Consumption/Demand - KWHrs	730,192,924	775,829,752	822,501,758	866,660,090
Reference Cost per KwHr Consumed - \$/KWHr	0.2683	0.2918	0.2819	0.2814

SCHEDULE 4
Belize Electricity Limited (BEL)

Rate Review for FTP 2024 | 2028

Approved Rate of Return (ROR), OPEX, and Gearing Ratio (G) for Full Tariff Period (FTP) July 1, 2024 to June 30, 2028

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

Period	2024 2025	2025 2026	2026 2027	2027 2028
ROR Lower Limit	6.5	6.5	6.5	6.5
ROR Target Limit	8.0	8.0	8.0	8.0
ROR Upper Limit	10.0	10.0	10.0	10.0

Approved OPEX for each ATP of the FTP \$:

Period	2024 2025	2025 2026	2026 2027	2027 2028
OPEX	37,973,229	38,542,827	39,120,970	39,707,784
GEC	3,176,913	3,224,566	3,272,935	3,322,029
Approved Gearing Ratio (G) - FTP	0.6			
Interest Rate for IDC (after approved Gearing Ratio) - FTP %	8.0			

SCHEDULE 5 Belize Electricity Limited (BEL)					
Tariff Basket Revenue (TBR) and Mean Electricity Rate (MER) for Full Tariff Period (FTP) July 1, 2024 to June 30, 2028					
Year	2024 2025	2025 2026	2026 2027	2027/2028	Total FTP
Revenue Components of TBR:					
Value added of Delivery (VAD)					
OPEX	41,047,567	46,196,193	48,766,823	50,135,436	186,146,019
Return	34,945,364	42,745,921	43,133,004	47,189,980	168,014,268
Depreciation	22,773,778	26,680,595	27,524,014	29,396,925	106,375,312
Taxes/License Fees	8,253,654	10,209,134	10,470,436	11,016,526	39,949,749
Sub-Total (VAD)	107,020,362	125,831,843	129,894,277	137,738,867	500,485,348
Reference Cost of Power	195,891,553	226,398,686	231,838,152	243,851,405	897,979,797
Corrections -	1,086,380	22,940,573	22,940,573	22,940,573	69,908,100
Less: Other Income	(3,865,440)	(3,929,883)	(3,929,883)	(3,929,883)	(15,655,090)
Tariff Basket Revenue	300,132,855	371,241,219	380,743,119	400,600,962	1,452,718,156
Demand [MWhs]	730,193	775,830	822,502	866,660	3,195,185
MER - July 1, 2024 - June 30, 2028	0.4110	0.4785	0.4629	0.4622	0.4547
Direct Cost of Delivery (COD) - \$:	0.1353	0.1490	0.1452	0.1462	0.1441
Corrections + Taxes - Other Income - \$:	0.0075	0.0377	0.0358	0.0346	0.0295
Cost of Power (COP) - \$:	0.2683	0.2918	0.2819	0.2814	0.2810

SCHEDULE 6
Belize Electricity Limited (BEL)

Proposed Tariffs for Annual Tariff Period January 1, 2026 to June 30, 2027

Customer Class		Service Type/Consumption Block	2026 2027 Jul-Jun
Residential	Social	Minimum Charge - Social	5.00
		Soc. - First 60 kWhs	0.22
	Residential	Minimum Charge - Residential	10.00
		Res. -LV - First 50 kWh	0.36
		Res. -LV - 51 - 200 kWh	0.41
		Res. -LV- 201-300 Kwh	0.46
		Res. -LV- Above 300 kWh	0.48
Com I	Com I	Com1 - LV - Service Charge	10.00
		Com1 -LV - First 50 kWh	0.36
		Com1 -LV - 51 - 200 kWh	0.41
		Com1 -LV- 201-300 kWh	0.46
		Com1- LV- Above 300 kWh	0.48
Com II	Com II	Com. - HV - Service Charge	150.00
		Com. - HV - First 10,000 kWh	0.45
		Com. - HV - Above 10,000 kWh	0.43
Ind	Ind	Service Charge	250.00
		Energy	0.29
		Demand (per KVA)	23.00
St Lights	St Lights	Energy	0.45

SCHEDULE 7

Belize Electricity Limited (BEL)

Approved Fees and Charges effective July 1, 2024

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 damager meter cover		50.00
Replacement of Meter due to Service/Meter Tampering		40.00
Pole Rental (Monthly Fees per attachment per Pole)	Telecommunications Operations (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

11 Appendix A

In Support of this Application, BEL's filing includes the following appendices:

- A. ARP 2025 Workbook (as an attached Excel file).
- B. CoSSModel_ToU (as an attached Excel file).