Attachment 1

NOV 2024

BLATCHFORD RENEWABLE ENERGY

2025 Rate Filing

Attachment 1 - FCS02679

Blatchford Renewable Energy

Edmonton

Table of Contents

Executive Summary

Blatchford Renewable Energy is a public, City-owned utility established to operate a District Energy Sharing System (DESS) plus certain mechanical equipment within the customer buildings themselves. All buildings in the Blatchford development, with the exception of net-zero carbon buildings, must be connected to the DESS for all heating, cooling and domestic hot water services.

During its budget deliberations in Fall 2022, Edmonton's City Council approved the 2023-2026 operating and capital budgets for the Blatchford Renewable Energy utility. The 2025 utility rate filing is consistent with discussions during the 2023-2026 approved budget process and rate increases included in the 2023 and 2024 rate filings. The rate increases are summarized below by customer class:

1. **Townhouse lots** - 10.0 per cent rate increase for both the daily fixed and variable rates.
2. **Multi-Unit lots** - 2.7 per cent and 10.0 per cent rate increase for the monthly fixed and variable rates, respectively.
3. **Infrastructure Fees -** 2.7 per cent rate increase for both townhouse and multi-unit buildings.

The 2025 rate filing includes a set of schedules, Minimum Filing Requirements, which detail the costs of service, the resulting revenue requirement, and revenue (Attachment 2 of report FCS02679). These schedules are similar to the Minimum Filing Requirements format utilized in the electric and gas utility industry in Alberta.

The 2025 rate filing has been prepared based on rate setting principles outlined in approved Utility Fiscal Policy C597B (Attachment 3 of report FCS02679). Rate increases were determined based on the costs of providing utility services and ensuring customers pay at most a comparable fee to what they would elsewhere in the City of Edmonton. This "comparable fee" is referred to as business as usual (BAU).

1.0 Introduction

The Blatchford development aims to be one of the world's largest sustainable communities and home to 30,000 residents. Blatchford will be comprised of two primarily residential spaces on the east and west side of the site, along with a town centre, an 80-acre central park and a civic plaza.

Blatchford Renewable Energy (BRE) is a public, City-owned utility established to own and operate a District Energy Sharing System (DESS) plus certain mechanical equipment within the customer buildings themselves. All buildings in Blatchford, with the exception of net-zero carbon buildings, must be connected to the DESS for all heating, cooling and domestic hot water services.

The strategic objectives of BRE remain:

- the growth of the DESS and the integration of emerging technologies into the Utility's operation to reach steady state reliable operation and long-term financial sustainability
- to achieve Council's vision for a carbon neutral community powered entirely by renewable energy.

The growth of the new utility is, and will continue to be, closely connected to land development and sales activities in Blatchford. The first customer connections to the BRE system occurred in August 2020. By the end of 2024, BRE is projected to be connected to 104 accounts based on the sales activities of the Blatchford land development team and the builder's construction activities. The number of expected accounts is anticipated to increase to 188 and 298 in the years 2025 and 2026. By 2026, the BRE expects to provide thermal energy services to a connected floor space area of approximately 91,000 m^2, with all of this energy coming from the first energy centre. At full system build-out, it is estimated that about 1,400,000 m^2 of floor area will be connected to BRE, which will provide over 48,000 MWh of heating and over 34,000 MWh of cooling energy annually.

Buildings seeking to be exempted from connecting to the DESS must be designed, built and certified to a net-zero carbon standard, or better. There is currently one homebuilder in Blatchford that is building homes in adherence with the exemption requirements. The builder is in the process of building eight townhouse units.

2.0 Current Situation

City Council approved the 2024-2026 BRE operating and capital budgets, and 2024 utility rates in the fall of 2023. The 2024 rate filing reflected 2024 to 2026 rate increases of 10 per cent per year for townhouses and multi-unit (variable and fixed) and a 2.7 per cent rate increase per year for infrastructure fees. These rate increases were determined to ensure BAU was maintained and inflationary impacts were factored for the 2024-2026 approved budget period. The proposed rate increases in the 2025 utility rate filing are consistent with these discussions.

As part of the original 2023-2026 budget process, a business case for BRE was prepared to identify the need for a $93 million non-refundable cash infusion for the initial years of operation to offset the capital investment required to establish BRE and allow it to grow to achieve financial sustainability.

At the May 9, 2023 Utility Committee, Administration provided Integrated Infrastructure Services report IIS01821, BRE Funding Opportunity report. The update reconfirmed the need for a $93 million non-refundable cash infusion to ensure long-term financial sustainability and enable BRE to continue to provide utility rates that ensure customers utility bills are comparable to BAU. The report also highlighted an opportunity to partially address the need through a $23 million grant from National Resource Canada (NRCan) through the Smart Renewables and Electrification Pathways (SREP) program.

The NRCan grant is based on a shared funding model, which requires the City to fund 70 per cent of the approved eligible projects, while the grant will fund the remaining 30 per cent. The grant will be paid from 2023-2029, which required the approval of further capital budget spending from 2027 to 2029. City Council approved this budget continuation on June 13, 2023.

Administration continues to explore other funding opportunities. Factoring in the successful receipt of the $23 million grant results in decreasing the required non-refundable funding to approximately $70 million.

Capital expenditures to date have been financed through self-supporting tax guaranteed debt. Ultimately BRE will require grant funding, external funding or some other non-refundable cash infusion to be financially sustainable. Without the non-refundable cash infusion, the cost of BRE's services would become uncompetitive, placing a higher burden on Blatchford ratepayers compared to ratepayers living elsewhere in Edmonton (which is counter to the BAU guidance). If sufficient external funding is not obtained, other alternatives for the non-refundable cash infusion would need to be considered, including potentially increasing the

infrastructure connection fee, increasing customer utility rates or accessing tax levy funding support.

Borrowing funds in the interim results in financing costs that will need to be managed. BRE has used the City's working capital, to cover annual operating shortfalls and debt servicing costs on $23.3 million debt borrowing as of December 31, 2023. The amount of working capital funding used by BRE at the end of 2023 is $17 million. Administration continues to assess the impacts of interim financing costs on the long-term financial sustainability of BRE. If BRE is required in the future to fund portions of the required cash infusion through utility rates, long-term financial sustainability will likely be affected.

On June 23, 2024, Administration presented the updated FCS01999 Blatchford Renewable Energy Utility Fiscal Policy C597B and IIS01945 2024-2027 Business Plan for Blatchford Renewable Energy to the Utility Committee. Administration revised the BRE financial model considering impacts of the land development schedule, slower than expected non-refundable cash infusions and reassessed the long-term financial sustainability of BRE. This discussion included key principles of the utility fiscal policy, including BAU rates, and financial sustainability targets.

One of the critical elements in ensuring the financial sustainability of the Utility is the requirement of a non-refundable cash infusion (i.e. grant funding) to ensure long-term financial sustainability. The Blatchford Renewable Energy Utility financial forecasting is based on the assumption that the majority of the remaining required cash infusion will be secured before the construction of the next major capital expansion of the next energy centre, currently forecasted to be in 2028.

This would mean that the majority of the remainder of the non-refundable cash infusion would likely need to be secured before 2028 otherwise the long-term financial sustainability of the utility would be at risk. If the non-refundable cash infusion is not secured before 2028 other financial alternatives may be required such as higher utility rates compared to BAU and/or tax levy support to ensure the Utility remains financially sustainable. One of the original principles discussed when the utility was established was the need for it to be self-sustaining with no support from the general tax-levy.

BRE will only pursue further capital expansion as required by land development and construction activities. As energy load requirements are heavily influenced by the land development plan, builder pace and market conditions, any resulting material changes will affect utility infrastructure planning.

3.0 Methodology & Key Assumptions

UTILITY FISCAL POLICY (C597B)

The current policy (Attachment 2 of report FCS02679), approved on June 24, 2024, has been established to:

1. Ensure that the Blatchford District Energy Utility is operated in a manner that reflects City Council's overall vision and philosophical objectives for the Utility.
2. Ensure that there is a consistent approach year over year for the financial planning, budgeting and rate setting for the City managed utility.
3. Ensure that utility is financially sustainable over the long term.

In a typical utility environment, customer rates are designed by customer class to fully recover the forecasted revenue requirement or full cost of actual services. BRE does not fully follow this methodology.

In the early stages of the BRE utility there was not a sufficient customer base to collect the required revenues at a rate that is comparable to a fee customers would pay elsewhere in the City of Edmonton through their energy utility bills and maintenance costs.

This is as a result of following guiding principle and key objectives in the Utility Fiscal Policy:

> "Customer rates based on the forecast cost of providing service will be assessed annually to ensure they remain competitive with other longer-term heating and cooling options.

1. The Utility will strive for customers to pay at most a comparable fee to what they would elsewhere in the City of Edmonton through their energy utility bills and maintenance costs.
2. The assessment will take into account the longer-term nature of utility infrastructure being used to provide services to customers, and market fluctuations that may occur annually in the commodity price of gas and electricity relative to the stable cost of providing thermal energy from the Blatchford District Energy Sharing System.

This "comparable fee" is also referred to as Business As Usual (BAU). The 2025 rate filing was prepared in accordance with the rate setting principles established by the current Blatchford District Energy Utility Fiscal Policy (597B).

LAND DEVELOPMENT

The 2025 rate filing is based on the most recent land development and sales forecast by the Blatchford Redevelopment Office. The land development schedule is a critical component of the BRE forecasts as it determines the amount and timing of the required energy load, eventually determining the timing for capital expenditures.

Currently, townhouses are the only building types connected to the system, although some multi-unit buildings are under development. Table 1 provides the actual and forecast customer connections and energy consumption from 2020-2026:

Table 1: 2020-2026 BRE Customer Connections and Energy Consumption

	2020	2021	2022	2023	2024	2024	2025	2026
Description	**Actual**	**Actual**	**Actual**	**Actual**	**Restated Budget**	**Forecast**	**Budget**	**Budget**
New Customer Connections								
Townhouses	8	17	20	30	39	29	81	104
Multi-Unit Buildings	-	-	-	-	-	-	3	6
Total DESS Connections	**8**	**17**	**20**	**30**	**39**	**29**	**84**	**110**
Total DESS Connections Accumulated	**8**	**25**	**45**	**75**	**114**	**104**	**188**	**298**
Energy Consumption (MWh)								
Townhouses	14	213	464	723	1,081	986	1,782	2,825
Multi-Unit Building	-	-	-	-	-	-	525	944
Total Energy Consumption	**14**	**213**	**464**	**723**	**1,081**	**986**	**2,308**	**3,769**

The utility regularly updates the connection forecast, which is dependent on various internal and external factors including development approvals, site construction timelines, sales market, housing market conditions and home builder construction timelines. In 2024, BRE continues to develop better and quicker methods for forecasting the internal and external factors, resulting in more representative budgets. With this work, the 2024 budget was restated in Table 1 to reflect a revised forecasting methodology that is more representative of results for both customer counts and energy consumption. Land Development's forecasts are for a specific point in time accounting for the District Energy Sharing System being a modular flexible system that is constructed in stages in response to the pace of development in the community.

In past rate filings the annual customer count assumed all customers started on January 1 of the year and that all buildings were completed within one year from sale of the land. As Administration has gained more experience in operating BRE the data now shows that customers start throughout the year with the largest number connecting to the system in the last quarter of the year. This same work also identified that construction completion has been closer to two years from sale of

the land and so customer counts with energy demands were also adjusted for this information in this rate filing.

COST OF SERVICE STUDY

The traditional utility regulatory approach in setting customer rates involves the preparation of a cost of service study, which groups utility customers into unique customer classes. The cost of service study distributes the total forecast revenue requirement to each customer class based on established cost functional, classification and allocation methodologies.

In 2023, a preliminary cost of service study (COSS) was completed but has not been fully utilized in the design of proposed utility rates with only one customer class currently established at Blatchford. As additional customers are connected, additional consumption and cost data will become available to support future COSS analysis. The BAU principle, as outlined in the Fiscal Policy, is the guide in determining utility customer rates as this sets the maximum rates BRE can set. BAU continues to be the foundation in the 2025 Rate Filing for rate development.

As multi-unit customers are not anticipated to grow to a significant capacity until later in the 2023-2026 budget cycle, Administration will continue to monitor customer activity and bring forward an updated COSS when appropriate.

4.0 Proposed Utility Rates

The proposed customer rates effective January 1, 2025, are for the two rate classes and building types currently proposed for Blatchford: townhouse lot and multi-unit lot. Each townhouse lot in Blatchford is individually serviced by BRE, while the multi-unit lots may be serviced by a single energy transfer station, to distribute energy across the multi-unit complex. How the multi-units will be serviced will be further established as design on these buildings progresses.

There are two types of fees and charges for Blatchoford's customers. A one-time infrastructure fee is initiated when a builder first connects to the energy system. The other types of fees and charges are associated with delivery of energy, which include a fixed monthly charge per day, or a capacity charge, and a variable consumption rate, based on kilowatt hour of energy used.

Fees are approved by City Council on an annual basis as part of the rate filing process. Table 2 below provides the approved 2024 rates and the proposed 2025 rates. The proposed rate increases are consistent with the 2024 approved rates and align with discussions leading to the approval of the 2023-2026 operating and capital budgets, inflationary impacts and the utility fiscal policy.

Table 2: 2025 Proposed BRE Customer Rates

Description	2025 Rate Increase	2025	2024 Rate Increase	2024
Infrastructure Fee				
Townhouse Lot Residential (per unit)	2.7%	$1,999.60	2.7%	$1,947.03
Multi-Unit Lot Residential (per unit)	2.7%	$1,999.60	2.7%	$1,947.03
Multi-Unit Lot Commercial (per square meter)	2.7%	$22.85	2.7%	$22.24
Townhouse Lot				
Monthly Charge (unit per day)	10.0%	$2.07	10.0%	$1.88
Variable Heating and Cooling (per kWh)	10.0%	$0.0358	10.0%	$0.0325
Multi-Unit Lot				
Monthly Charge (per kW peak capacity per month)	2.7%	$13.18	2.7%	$12.84
Variable Heating and Cooling (per kWh)	10.0%	$0.0358	10.0%	$0.0325

The rate increases proposed above in Table 2, have been determined to ensure long-term financial sustainability, considering economic and market factors, as well as to ensure the Utility's BAU principle is achieved.

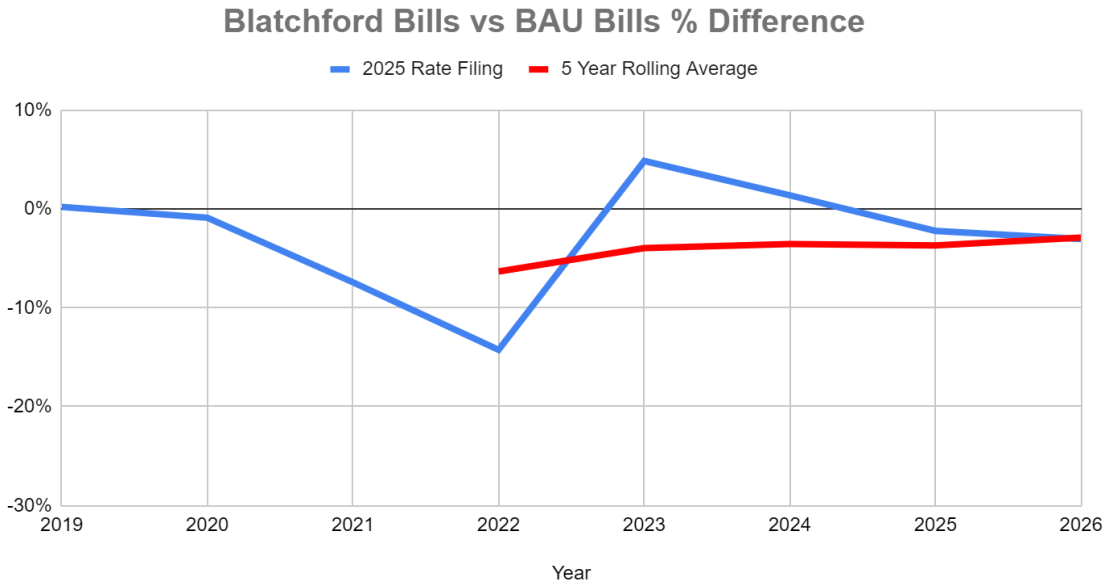
TOWNHOUSE UTILITY RATES

Townhouse lots are designated by the City of Edmonton to include one townhouse unit and may include a garage suite and/or basement suite. For townhouse utility rates, a 10 per cent rate increase in 2025 is being proposed for both the daily fixed and variable rates. This is similar to the rate increases approved for 2024.

This is consistent with discussions in 2022 regarding the need to continue with 10 per cent rate increases throughout the approved 2023-2026 budget period to ensure utility rates for townhouses get closer to meeting BAU on an average long-term basis. BAU, as noted previously, is an estimate of what a rate-payer of an average Edmonton home outside of Blatchford would pay for heating, cooling, and utility maintenance. Within Blatchford, homeowners pay the cost for heating and cooling energy to the BRE while electricity, and utility maintenance costs are paid to external providers.

Table 3 below provides an updated summary of the projected BAU variance for a BRE townhouse customer compared to a BAU townhouse customer based on the proposed rate increases and estimated costs for an average homeowner.

Table 3: Townhouse - BAU Variance by Year (BRE vs. BAU)



Based on the chart above, in isolation, the projected BAU variance between Blatchford rates and BAU rates for 2024 is 1.4 per cent (as shown by the blue line). The current 2024 calculation is forecast based on actual energy rates from January 2024 to October 2024 and a forecast of the energy rates for the remainder of the year.

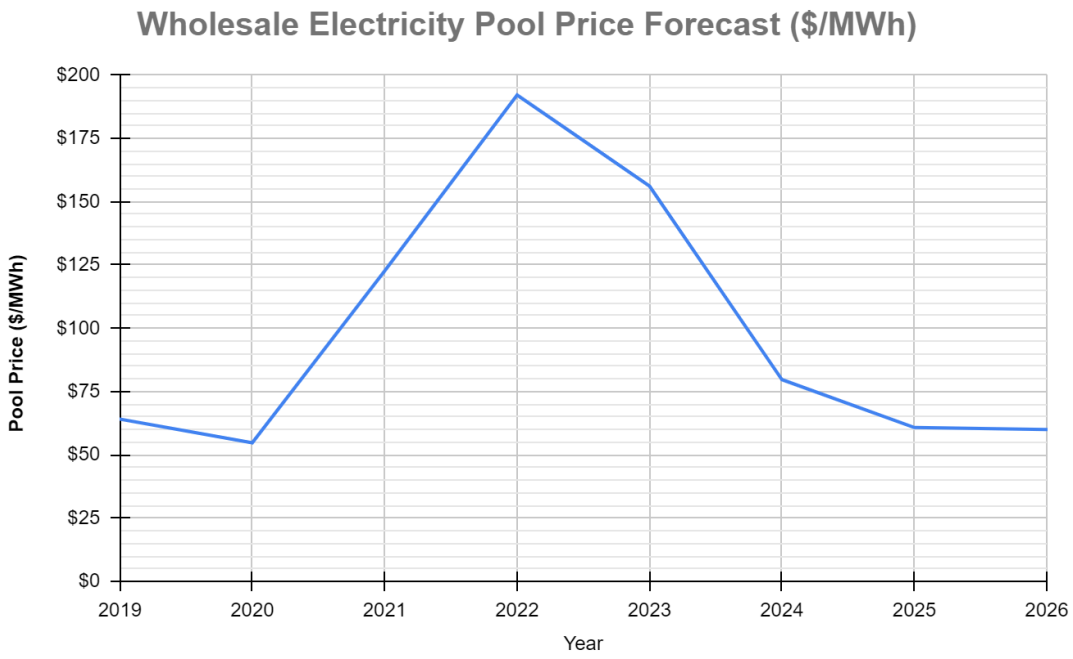
The BAU variance is a result of the variance between the forecast level of utility rates as compared to the actual rates to date in 2024. For example, a major component used in this calculation are electricity rates, based on Regulated Rate Option (RRO) rates. The RRO is an electricity rate within Alberta that is based on floating market rates for customers that are not on a fixed contract with an energy retailer.

As noted in the Table 3 above, utility rates were forecasted to be 6.1 per cent above BAU in 2023 due to abnormally high electricity rates. The average RRO rate ($/kWh) for electricity in 2023 was $0.2021 vs. 2024 which is projected to be $0.1352. As shown, the BAU variance is expected to come down in 2024 as a result of electricity rates returning to more normalized levels. Electricity rates are forecasted to continue to normalize in 2025 and 2026. More importantly, the 5 year rolling average (the red line) shows that overall utility rates have been well below BAU and are expected to continue to be below in the future as this line remains below zero per cent throughout the approved 2023-2026 budget cycle. This is despite the 2023 electricity variable rate spike, Blatchford's approved 10 per cent rate increases for 2024 rates, and the forecasted 10 per cent increase for 2025. In 2025, utility rates continue to be below BAU with the same proposed rate increase as approved for 2024 in the 2025 Rate Filing. The Utility continues to use historical and forecasted averages to assess BAU rate setting to ensure this aligns with the intent in the Utility Fiscal Policy for stable revenue and annual market fluctuations in energy costs.

The BAU variances being shown are also estimates, as what BRE customers pay for their electricity (i.e. RRO vs. fixed price contract) is between themselves and their energy retailer. For context, fixed price contract rates are also historically lower than recently approved RRO rates. As such, it is possible that the actual BAU variance each ratepayer is directly experiencing is much lower and to their benefit.

To support this,Table 4 below shows that wholesale electricity pool prices have returned to more normalized levels in 2024 as compared to 2023. Wholesale electricity pool prices are the rates retailers pay to purchase electricity from electricity generators. From 2024 to 2026, the BAU variance (including the 10 per cent rate increase) is forecast to drop to -3.0 per cent by using the wholesale pool prices as a baseline for forecasting. Table 4 shows the current forecast of wholesale electricity pool prices based on EDC Associates Ltd.

Table 4: Wholesale Electricity Pool Price Forecast



Electricity prices are one of the factors considered in the BAU calculation, because the heating and cooling is regulated in Blatchford by very efficiently operated heat pumps in each home, which are powered by electricity. In a traditional home, heat pumps are not present as heating is provided through furnaces utilizing natural gas, representing the majority of the energy impact, while electricity is only used for air conditioning systems. As a result, large increases in electricity prices can cause shifts in the BAU variance calculations.

MULTI-UNIT UTILITY RATE

Multi-unit lots are designated by the City of Edmonton and may consist of any combination of residential (e.g., condos, townhouses), commercial and institutional developments.

The Multi-unit rates are proposed to increase 2.7 per cent for monthly fixed rates and 10 per cent for variable rates. This is equivalent to the rate increases approved in the 2024 rate filing, consistent with Utility Committee discussions in 2023. This also aligns with discussions relating to the approved 2023-2026 operating and capital budgets.

The Multi-unit monthly fixed rate was first introduced in 2023, through a rate setting study with KPMG, and was set to mirror BAU. To maintain consistency with BAU, the proposed escalation of 2.7 per cent is equivalent to average forecasted inflationary increases over the approved 2023-2026 budget period. The same variable rate ($ per kWh) is used for both Townhouses and Multi-unit customers for consistency.

Currently there are no Multi-unit Blatchford utility customers. BRE is working with the first Multi-unit builders during their design process ensuring that peak heating and cooling demands (in kW) are met.

INFRASTRUCTURE FEE

Infrastructure fees are a one-time fee BRE collects from builders for townhouses and Multi-units upon connection to the utility. For 2025, the proposed rate increase is 2.7 per cent to maintain consistency with other proposed rate increases.

BRE continues to review the current Infrastructure Fee structure to determine if there is a need to bring forward changes through future utility rate filings.

5.0 Long-Term Financial Sustainability

FINANCIAL INDICATORS

The Blatchford District Energy Utility Fiscal Policy has established Financial Indicators or measures which will provide financial information to assess the Utility's long-term financial sustainability. The targets set out in this Policy are:

1. Net Income
    a. Where the net income and rate of return are sufficient to cover current year expenses, working capital requirements and facilitate funding for capital infrastructure, rehabilitation and replacement of capital assets.

2. Cash Position
    a. Target cash position is equal to Pay As You Go funding for forecast capital expenditures in the Capital Plan plus an allowance for operating risk

3. Debt Service Coverage Ratio
    a. the minimum baseline target is recommended to be 1.5 to ensure earnings cover annual debt servicing costs

4. Debt to Net Assets Ratio
    a. The Utility will aim to maintain between 50 per cent and 70 per cent by balancing long-term financial sustainability with intergenerational equity.

The preparation of rate filings and evaluation of future utility business decisions, will take the achievement of the financial indicators into consideration. As BRE is still being established, the achievement of these financial indicators is expected to be achieved over an extended period.

NON-REFUNDABLE CASH INFUSION

Administration has communicated the requirement for a $93 million non-refundable cash infusion to the Utility Committee. The non-refundable cash infusion is a key element to enable BRE to:

1. Ensure the utility becomes financially sustainable in the long run without any ongoing subsidy,
2. Ensure customers pay a comparable fee to what they would elsewhere in Edmonton through their energy utility bills and annual maintenance costs.

The capital expenditures funded by the non-refundable cash infusion will result in

these assets being classified as contributed assets and for rate setting purposes will not impact Blatchford customers.

Administration has entered into an agreement after the successful application to the National Resource Canada - Smart Renewables and Electrification Pathways program for up to $23 million in grant funding. The remaining required non-refundable cash amount is approximately $70 million. BRE continues to apply for grant opportunities and to explore options for external funding. Currently, BRE has been using debt financing for capital expenditures for the initial stages of infrastructure investment.

BRE's operations are capital intensive and guaranteeing cash infusions in advance of the next Energy Center construction will be critical to minimize additional debt financing costs. Major capital expenditures, such as Energy Centers, are directly tied to the forecast land development cycle and required energy load demands. It is important that future cash infusions are in alignment with the capital funding requirements.

The timing for the next Energy Center is being reviewed in alignment with the current development master plan update. BRE is cognizant of installing energy supply capacity hand in hand with the increasing energy demand. This will include careful consideration of providing base and peak load requirements. More detailed work is underway to review the best order of energy center development connected to land development and builder construction activities for best possible project outcomes, as outlined in the Business Plan presented earlier this year.

This rate file has been modeled using the latest development, builder and infrastructure forecasts. Current design activities are focussed on confirming these assumptions or, if it makes sense, to deviate from these assumptions providing better triple bottom line benefits to the Utility. BRE will ultimately require grant funding or other external non-refundable cash infusion to be financially sustainable. Without the non-refundable cash infusion, the cost of BRE's services will become uncompetitive, placing a higher burden on Blatchford ratepayers compared to ratepayers living elsewhere in Edmonton.

The financial sustainability of the utility is contingent on the utility receiving non-refundable cash infusion. If this is not secured, other funding options will have to be considered including increasing the infrastructure connection fee, increasing the utility customer rates, partnering with external utility providers or requesting tax-supported debt. The majority of the remainder of the non-refundable cash infusion would likely need to be secured before 2028 otherwise the long-term financial sustainability of the utility would be potentially at risk. If the non-refundable cash infusion is not secured before 2028, other financial alternatives

may be required such as higher utility rates compared to BAU and/or tax levy support to ensure the Utility remains financially sustainable. One of the original principles discussed when the utility was established was the need for it to be self-sustaining with no support from the general tax-levy.

Financial modeling indicates BRE is on track with the information presented in FCS01999 - Blatchford Renewable Energy Utility Fiscal Policy presented June 24, 2024 to Utility Committee which indicated that long-term financial sustainability is still achievable. The forecast timeline for achievement of the financial indicators are positive net income in 2030, positive cash position in 2055 and debt to net asset ratio achieved in 2066.

The impact of future land development, review of the required non-refundable cash infusion and impact to long-term financial sustainability for the BRE will be updated as development on site continues.

6.0 Operating Budget & Forecast

The operation of the first stages of the Energy System at Blatchford, is managed internally by BRE in partnership with other City departments, external contractors and technical experts. Engineering and operational support is provided internally with some support from external technical consultants and contractors. Qualified service providers have been engaged for all aspects of utility operation.

Given City Council's direction, BRE will continue to investigate the opportunity to engage an external partner in its operations.

Operating Costs, based on current information, are presented in Table 5 and individual tables which summarize forecast Operating Costs by major expense category with a detailed discussion of each cost category to follow.

Table 5: Operating by Major Expense Category ($000s)

	2022	2023	2024	2024	2025	2026
Description	Actual	Actual	Approved Budget	Forecast	Budget	Budget
Operating						
Utilities	$53.8	$58.4	$70.2	$85.2	$95.9	$98.2
Operations and Maintenance	498.3	562.6	655.8	657.8	833.4	677.4
Administration	395.9	320.8	578.7	515.4	578.4	556.9
Customer Billing Services	6.0	34.2	20.7	20.7	64.1	33.0
Corporate Administration	75.8	132.3	287.4	281.5	302.8	328.1
Total Operating	**$1,029.9**	**$1,108.2**	**$1,612.7**	**$1,560.6**	**$1,874.7**	**$1,693.6**

The following sections provide additional detail for each major operating cost category in Table 5 above. Some costs have shifted categories from the 2024 Rate Filing as these have been reclassified to better reflect actual reporting requirements in the 2025 Rate Filing. Where this has occurred, the section will identify the shift and reason.

6.1 UTILITIES

BRE requires electricity, natural gas and water/drainage/sewer utility services to operate the on site Energy Centres. Table 6 summarizes the actual and forecast cost of utilities from 2022-2026.

Table 6: Utility Costs ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Utility Costs						
Electricity	$47.3	$51.6	$60.0	$75.0	$85.0	$87.0
Natural Gas (Inc. Carbon Tax)	0.5	0.7	1.2	1.2	1.0	1.0
Telephones	-	0.0	2.4	2.4	2.4	2.4
Water/Drainage/Sewer	6.0	6.0	6.6	6.6	7.5	7.7
Total Utility Costs	**$53.8**	**$58.4**	**$70.2**	**$85.2**	**$95.9**	**$98.2**

Electricity needs have increased in 2024 with the expansion of Energy Centre 1 and associated construction, testing and operation. These increases are forecast to continue in 2025 and beyond, as the number of customers continues to grow along with an adjustment for inflation. The utility forecasts are based on the rates provided corporately.

6.2 OPERATIONS & MAINTENANCE

The forecast Operations & Maintenance costs for each year are comprised of the major cost categories found in Table 7.

In the 2023 Rate Filing, facility maintenance costs were shown under Operations & Maintenance. These costs are provided internally by the City of Edmonton and have been reclassified for 2024, 2025 and 2026 in Table 11: Corporate Administration Costs.

Table 7 below shows the cost breakdown of Operating and Maintenance by Major Expense Category.

Table 7: Operations & Maintenance by Major Expense Category ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Operations and Maintenance						
Personnel	$439.2	$515.3	$587.2	$589.2	$614.4	$658.0
Training and Development	4.6	1.0	7.3	7.3	7.5	7.7
Equipment Rental	0.6	13.0	11.2	11.2	11.5	11.7
Technical Consultants	51.9	33.3	50.0	50.0	200.0	-
General Services	2.1	-	-	-	-	-
Total Operating and Maintenance	**$498.3**	**$562.6**	**$655.8**	**$657.8**	**$833.4**	**$677.4**

Personnel

BRE currently has 5.1 FTEs responsible for the managing of day-to-day operations. Table 8 provides details of the current direct employees including position title and the portion of each employee's time allocated to BRE (a percentage of some

employee's time is allocated to other renewable energy operating and capital projects currently being undertaken by the City of Edmonton).

Table 8: BRE Personnel

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Director - Renewable Energy Systems	0.4	0.4	0.4	0.4	0.4	0.4
Program Manager - Renewable Energy Systems	0.7	0.7	0.7	0.7	0.7	0.7
Program Manager - Renewable Energy Systems	0.7	0.7	0.7	0.7	0.7	0.7
Coop Engineering Student	1.0	1.0	1.0	1.0	1.0	1.0
Administrative Assistant	0.3	0.3	0.3	0.3	0.3	0.3
Project Coordinator	-	1.0	1.0	1.0	1.0	1.0
Methods Analyst	-	1.0	1.0	1.0	1.0	1.0
Total Full Time Equivalents	**3.1**	**5.1**	**5.1**	**5.1**	**5.1**	**5.1**

The total forecast cost of BRE personnel was determined by applying the full time equivalent factor to each employee's current total compensation (base salary plus benefits). The increase in personnel costs from the 2024 Forecast to 2025 Proposed Budget include a two per cent inflationary increase based on wage escalation of current staff. It also includes prior period settlement adjustments for union and management positions that were not included in the 2024 Forecast.

Training and Development

Training costs to further professional development are on budget in 2024 and are expected to remain consistent for 2025-2026 and have only been increased for inflationary impacts.

Equipment Rental

Costs related to the leasing and rental of equipment has been included in the BRE budget. The 2024 forecast cost for lease/rental of tools and computers, has been increased by inflation for the 2025-2026 proposed budget.

Technical Consultants

Operating costs includes $50,000 in 2024 to address a motion made at Executive Committee (October 12, 2022) to undertake a feasibility study to expand the Blatchford Renewable Energy Utility to areas adjacent to Blatchford outside the current service area, including but not limited to Hangar 14.

There is a one-time cost in 2025 of $200,000 to address a motion passed at the June 24, 2024 Utility Committee Blatchford Renewable Energy Utility - Analysis of Development Options, which is due back in Q2 2025. The increased costs are required to engage an external technical and financial consultant to address and examine the proposed shared-utility approach.

ADMINISTRATION

The forecast Administration costs each year include: (1) Marketing, Education and Communication, and (2) External Professional Services Costs. A summary of Administration Costs is found in Table 9 below:

Table 9: Administration ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Administration						
Marketing, Education and Communication	$134.1	$115.9	$115.9	$115.9	$115.9	$115.9
Consulting and Professional Services	261.8	204.8	462.8	399.5	462.5	441.0
Total Administration	**$395.9**	**$320.8**	**$578.7**	**$515.4**	**$578.4**	**$556.9**

Marketing, Education and Communications

The Marketing, Education & Communication costs include an estimate for time and materials required for marketing, communication and education of the Blatchford community utility customers during the forecast period. This service is provided internally by Communications and Marketing staff.

As part of the 2023-2026 Shared Service and Interdepartmental Budget, costs were not increased after they were approved in fall 2022.

Consulting and Professional Services

Consulting and professional services are used to assist with operational aspects of BRE. In 2024, the forecast costs were lower than budget as the spending was adjusted to align with updated development plans. Spending in 2025 aligns to the expected increase in site development and growth in customers.

6.3 CUSTOMER BILLING SERVICES

BRE has a service level agreement with EPCOR for billing and customer service for December 31, 2023 to December 31, 2025 to support Blatchford Renewable Energy's customers. The terms of this agreement have been incorporated into the forecast found in Table 10 below.

Table 10: Customer Billing Service Costs ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Customer Billing						
Monthly Billing Charges	$6.0	$4.3	$14.4	$14.4	$18.1	$27.2
Annual Billing Automation Charge	-	6.5	6.3	6.3	6.0	5.7
One-time Set-up Charges	-	23.4	-	-	40.0	-
Total Customer Billing	**$6.0**	**$34.2**	**$20.7**	**$20.7**	**$64.1**	**$33.0**

BRE incurs a Monthly Base Services Fee of $6.45 per account per month for billing and customer service support in 2024. For the 2024-2026 budget period, BRE has forecast according to the current agreement ending December 31, 2025. For 2026 costs, which are outside of the contract term, the forecast uses an estimated annual increase of 2.0 per cent in the Monthly Base Services Fee and forecast customer counts from Table 1. The City will work with EPCOR in the future to extend this agreement.

BRE will incur an annual billing automation charge over the 2023-2026 forecast period (ending in 2031) to recover the cost of setting up Blatchford accounts in EPCOR's new billing system. An additional $40,000 is forecast in 2025 for the cost of programming new BRE rate customers.

6.4 CORPORATE ADMINISTRATION

The forecast Corporate Administration costs each year include: (1) Shared Services; and; (2) Transportation and Insurance costs. Shared Services includes Facility Maintenance costs, which were in Table 7: Operations and Maintenance in the 2023 Rate Filing and have been moved to Table 11 for this rate filing.

Table 11 below summarizes the Corporate Administration Costs over the forecast period.

Table 11: Corporate Administration Costs ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Corporate Administration						
Shared Corporate Services	$75.4	$132.3	$279.5	$279.5	$300.7	$326.0
Other - Transportation and Insurance	0.4	-	7.9	2.0	2.1	2.1
Total Administration	**$75.8**	**$132.3**	**$287.4**	**$281.5**	**$302.8**	**$328.1**

The City of Edmonton employs a shared service model whereby support services for the operations of all City businesses are provided through centralized areas of expertise. This approach takes advantage of efficiencies gained through economies of scale and opportunities to provide more robust systems and services (e.g., technology-related services).

The largest portion of shared service is for facility maintenance services (FMS). The infrastructure built and installed to serve customers at Blatchford requires ongoing maintenance. The maintenance costs for 2025-2026 are based on a capital maintenance factor (i.e., a percentage of capital) for each class of assets (e.g., ground heat exchange equipment, energy center equipment, distribution piping, etc.) applied to the total capital in service each year for each class of assets and real time experience by FMS based on initial years of operation. The capital maintenance

factors were based on industry standards for similar types of equipment. This also takes into account initial warranty considerations for new equipment. Maintenance of the Blatchford DESS is provided by the City's Facilities Maintenance Services Branch.

Financial, regulatory and legal support for BRE is provided by the Financial and Corporate Services department and the City's Legal Services Branch. Both areas are involved in the management of the bylaw, the fiscal policy, annual rate filings plus operating and capital budget development for BRE.

7.0 Capital Budget & Forecast

The approved Blatchford Renewable Energy capital budget plans incorporate anticipated growth in the community. There are no new capital or business cases requiring budget approval at this time. Table 12 below provides a summary of the forecasted capital additions and construction work in progress (CWIP) by asset group during the forecast period with more detailed descriptions to follow.

Table 12: Capital Additions and Construction Work In Progress ($000s)

	2022	2023	2024	2024	2025	2026
Description	Actual	Actual	Approved Budget	Forecast	Budget	Budget
Contributed Previous Year Balance	$818.7	$1,702.2	$4,967.9	$3,466.6	$3,679.0	$10,753.9
Contributed Capital Expenditures						
Energy Center 1	66.9	1,683.4	362.6	1,560.5	-	-
Sewer Heat Exchange	-	-	-	-	1,395.0	4,706.6
Distribution Piping System	1,645.8	6,242.2	1,500.0	1,830.0	638.5	1,126.0
Energy Transfer Stations	43.8	70.4	1,500.0	3,435.8	450.0	1,000.0
Energy Center	880.1	81.0	436.0	1,987.9	5,679.9	8,559.6
Less Capital Additions:						
Energy Center 1	(63.5)	-	(3,897.9)	(3,335.9)	-	-
Sewer Heat Exchange	-	-	-	-	-	-
Distribution Piping System	(1,645.8)	(6,242.2)	(1,500.0)	(1,830.0)	(638.5)	(1,126.0)
Energy Transfer Stations	(43.8)	(70.4)	(1,500.0)	(3,435.8)	(450.0)	(1,000.0)
Energy Center	-	-	-	-	-	(15,048.5)
Contributed Current Year Balance	**1,702.2**	**3,466.6**	**1,868.6**	**3,679.0**	**10,753.9**	**8,971.6**
Non-Contributed Previous Year Balance	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Non-Contributed Capital Expenditures	-	-	-	-	-	-
Less: Non-Contributed Capital Additions	-	-	-	-	-	-
Non-Contributed Current Year Balance	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0

ENERGY CENTRE 1

The recent expansion of Energy Centre 1 was required to provide energy for land development stages in Blatchford west and east, which started coming online in 2023. As of 2024, Energy Centre 1 is able to generate 4.25 MW of heating and 4 MW of cooling energy. Design for the expansion was completed in 2022, with construction completed and the full expansion of Energy Centre 1 operational in Q1 2024.

SEWER HEAT EXCHANGE

The Sewer Heat Exchange System (SHX) will provide heat recovered from wastewater diverted from sewer that is screened and sent through a heat exchanger to provide energy to BRE. This project was scheduled to be completed in 2030 in the approved budget. Administration has been successful in finalizing an agreement for grant funding for this project, although this funding is contingent upon the City meeting specific milestones. The design for SHX was advanced to

determine final costs and schedule. BRE will come forward as the project design advances.

DISTRIBUTION PIPING SYSTEM

The distribution piping network distributes energy from the Energy Centres to the buildings and utility customers. As the development grows, so will the piping network. To facilitate the anticipated Blatchford development scenario, additional distribution piping is expected to be needed over the next four years in Blatchford west, east and market area.

ENERGY TRANSFER STATIONS

Energy Transfer Stations connect the main DESS infrastructure and the homes / buildings in Blatchford. These are builder-funded costs and the Energy Transfer Stations infrastructure are classified as contributed assets, which BRE operates and maintains.

ENERGY CENTRE

As outlined during the 2023 to 2026 budget deliberations, Council approved the design and construction of the first peaking Energy Centre 4 and subsequently delayed the detailed design and construction of the initially planned Sewer Heat Exchange Energy Centre, with base load provided by Energy Centre 1. The next Energy Center development is being reviewed in alignment with the current development master plan update.

As presented to Utility Committee on June 24, 2024 in report IIS01945 Blatchford Renewable Energy 2024-2027 Business Plan, BRE is cognizant of installing energy supply capacity hand in hand with the increasing energy demand. This will include careful consideration of providing base and peak load requirements. More detailed work is underway to review the best order of energy center development connected to land development and builder construction activities for best possible project outcomes.

AMORTIZATION & DEBT INTEREST EXPENSES

All required capital during the forecast period are projected to be contributed assets, and therefore will have no impact on the revenue requirement for amortization or interest on debt. The capital is considered to be contributed as they are not intended to be funded through the utility rates and instead are forecast to be funded by grants, external contributions or builder contributions.

8.0 Revenue Requirement

The 2025 budgeted revenue requirement is $1.87 million with expected revenues of $0.47 million. This results in a revenue shortfall of $1.41 million. Revenue shortfalls are also anticipated to continue into 2026, estimated at $1.07 million. Table 13 provides a summary of the revenue surplus/(shortfall).

Table 13: Total Revenue Requirement ($000s)

	2022	2023	2024	2024	2025	2026
Description	Actual	Actual	Approved Budget	Forecast	Budget	Budget
Revenue Requirement						
Total Operating	$1,029.9	$1,108.2	$1,612.7	$1,560.6	$1,874.7	$1,693.6
Depreciation	-	-	-	-	-	-
Debt Interest	-	-	-	-	-	-
Return on Rate Base	-	-	-	-	-	-
Total System Requirements	1,029.9	1,108.2	1,612.7	1,560.6	1,874.7	1,693.6
Revenue						
Revenue on Proposed Rates	110.1	56.5	108.8	114.3	154.6	361.3
Infrastructure Fee	9.7	146.3	180.6	42.8	311.9	262.9
Other Revenue - Government Grants	-	(56.0)	-	-	-	-
Total Revenue	**119.8**	**146.8**	**289.4**	**157.1**	**466.5**	**624.2**
Revenue Surplus (Shortfall)	**$ (910.1)**	**$ (961.4)**	**$ (1,323.4)**	**$ (1,403.5)**	**$(1,408.2)**	**$(1,069.4)**

Budgeted rate revenue is calculated to consider updated customer counts and energy load requirements as presented in Table 1 above. The 2025 budgeted customer revenue will not be sufficient to fully recover BRE 2025 revenue requirement. As with previous rate filings, BRE will continue to utilize a deferral account to accumulate these shortfall amounts until utility revenues exceed the revenue requirement. This is expected to be in approximately 2036.

Previous rate filings made the assumption that all customers connected on January 1st, and buildings were finished within a year of the land sale. With more operational experience, data shows that the customers connect throughout the year, peaking in the last quarter. Additionally, construction typically takes closer to two years. This rate filing reflects these updated timelines for customer connections and energy use.

DEFERRAL ACCOUNT AND INTEREST ON FINANCING

As BRE is anticipating revenue shortfalls in the forecast period, BRE will utilize short-term bridge financing through the City of Edmonton's working capital. As per the Utility Fiscal Policy:

> "Where the Utility's cash position is insufficient to meet cash flow requirements, the Utility will utilize bridge financing through the City of

Edmonton's working capital, with the interest being paid by the Utility at an interest rate that compensates the City of Edmonton reflecting the Fund Balance where the cash was drawn."

Table 14 below provides a summary of the forecast deferral account balances during the forecast period:

Table 14: Deferral Account Balance ($000)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Deferral Account Opening Balance	$ (2,471.2)	$ (3,509.5)	$ (4,876.3)	$ (4,666.4)	$(6,346.4)	$(8,135.3)
Annual Revenue Surplus/(Shortfall)	(910.1)	(961.4)	(1,323.4)	(1,403.5)	(1,408.2)	(1,069.4)
Deferral Account Closing Balance	**(3,381.3)**	**(4,470.9)**	**(6,199.7)**	**(6,069.9)**	**(7,754.6)**	**(9,204.7)**
Interest Costs	(128.2)	(195.5)	(270.3)	(276.5)	(380.7)	(489.9)
Deferral Account Closing Balance Plus Interest	**$ (3,509.5)**	**$ (4,666.4)**	**$ (6,470.0)**	**$ (6,346.4)**	**$(8,135.3)**	**$(9,694.6)**

RATE BASE

As noted previously, all required capital for the BRE system during the forecast period is projected to be financed by a combination of the non-refundable cash infusion and builder contributions resulting in no rate base on BRE's balance sheet. The following Table 15 below provides a summary of the mid-year net property, contributions and rate base:

Table 15: Mid-Year Net Property, Contributions and Rate Base ($000s)

Description	2022 Actual	2023 Actual	2024 Approved Budget	2024 Forecast	2025 Budget	2026 Budget
Rate Base						
Mid-year Net Property	$20,327.5	$24,360.4	$29,454.3	$31,817.6	$36,662.8	$45,794.3
Mid-year Net Contributions	(20,327.5)	(24,360.4)	(29,454.3)	(31,817.6)	(36,662.8)	(45,794.3)
Net Mid-year Rate Base	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

RETURN ON RATE BASE

As BRE is currently not financially sustainable and is charging customer rates that do not meet the current revenue requirement, no return on rate base has been implemented in the rate model. In this rate filing, the BRE continues to set rates according to the BAU methodology outlined in the fiscal policy. This will be reevaluated at a later date when appropriate.

9.0 Next Steps

Administration has committed to providing the 2025-2028 BRE Business Plan by Q2 2025 including BRE 2024 Annual Financial Statements and will ensure to report significant updates to BRE's current financial situation. Forecasts will factor in updated Blatchford land development schedules and the current status of the non-refundable cash infusion requirement.

At the June 24 2024 Utility Committee, a Council Motion was passed requesting that Administration prepare a response regarding the BRE Analysis of Development Options, which is due back in Q2 2025.

Administration will continue to explore potential funding opportunities to address the required non-refundable cash infusion and bring forward any related updates to the Utility Committee when appropriate.