

Blatchford Utility Proposed 2019-2022 Budget

Recommendation:

That Utility Committee recommend to City Council:

1. That the 2019 Operating Budget for the Blatchford Renewable Energy Utility with revenues of \$0.536 million and expenditures of \$2.115 million, be approved.
2. That the 2020 Operating Budget for the Blatchford Renewable Energy Utility with revenues of \$0.161 million and expenditures of \$2.690 million, be approved.
3. That the 2021 Operating Budget for the Blatchford Renewable Energy Utility with revenues of \$0.445 million and expenditures of \$2.634 million, be approved.
4. That the 2022 Operating Budget for the Blatchford Renewable Energy Utility with revenues of \$0.747 million and expenditures of \$2.876 million, be approved.
5. That the 2019-2022 Capital Budget for the Blatchford Renewable Energy Utility in the amount of \$52.839 million be approved, comprised of \$30.241 million in 2019-2022 and \$22.598 million in 2023 and beyond.
6. That the Blatchford Renewable Energy Utility 2019 Rate, as outlined in Attachment 2 of the October 25, 2018, Financial and Corporate Services report CR_6372, be approved.

Previous Council/Committee Action

At the October 25, 2018, Utility Committee meeting, the following motion was passed:

That the October 25, 2018, Financial and Corporate Services report CR_6372, be postponed to the November 16, 2018, Utility Committee meeting.

Executive Summary

The Blatchford Renewable Energy Utility, a new public, City owned utility, has been established to help achieve the City's long term goal of 100 percent renewable energy and carbon neutrality for the Blatchford development. This report presents the Proposed 2019-2022 Budget for the Blatchford Renewable Energy Utility, which includes the multi-year operating and capital budgets. This report also includes the

2019 Annual Rate Filing, which establishes customer rates for the initial year of operation of the Blatchford Utility.

Background

In December 2016, City Council directed the creation of the Blatchford Renewable Energy Utility on the basis of a District Energy Sharing System. This included the development of a draft Bylaw for Council's consideration to establish the Blatchford Renewable Energy Utility as a municipal public utility.

On April 10, 2018, City Council approved the *Blatchford Utility Fiscal Policy* (Integrated Infrastructure Services report CR_5452) which is the prerequisite needed in support of the Blatchford Renewable Energy Utility Bylaw 17943 and subsequent rate filing. The Fiscal Policy provides an overarching framework that outlines the financial parameters that will guide the long term sustainability of the Utility. The Fiscal policy also defines the Financial Planning principles for the Utility including:

- a) the Utility will prepare a four-year Business Plan, to be presented to the Utility Committee, prior to the preparation of the multi-year operating and capital budgets; and
- b) the Utility Committee will recommend annually to City Council the customer rates for the upcoming year, based on review of an annual rate filing prepared by the Utility subsequent to the preparation and presentation of the four-year Business Plan.

The *2019-2022 Business Plan* for the Blatchford Utility was presented to Utility Committee on June 8, 2018 (Integrated Infrastructure Services report CR_5853). This first Business Plan provided an overview of the strategic development of the new Utility with a focus on the initial four years of its operation. The Business Plan highlighted that the activities during the first four years of the Utility's existence will concentrate on the construction and operation of the initial stages of the District Energy Sharing System, as well as the development of the full Utility governance and operational structure.

The Business Plan also identified that in the first four years, as the Utility continues to develop and moves towards longer term financial sustainability, the regulatory and financial priorities will be to:

- 1) Establish the regulatory framework and customer rates based upon a cost of service methodology that ensures the Blatchford utility customers pay at most a comparable energy fee to what they would elsewhere in the City of Edmonton through their energy utility bills and annual maintenance costs;
- 2) Obtain a non-refundable cash infusion in order to fund the initial stages of the utility infrastructure development;
- 3) Obtain short-term bridge financing to be used as working capital for the day-to-day operations of the Utility as it continues to mature and begins to

generate positive net income and a positive cash position as the number of residents and utility customers increase.

The *Proposed 2019-2022 Budget* for the Blatchford Utility, which includes the multi-year operating and capital budgets, is included in Attachment 1 of this report. As discussed further below, the Proposed 2019-2022 Budget includes short-term bridge financing to be used as working capital by the Utility. The Proposed Budget also includes the issuance of long-term debt to fund the initial stages of the utility infrastructure development during the 2019-2022 timeframe until such time as a non-refundable cash infusion may be secured.

Bylaw 17943, Blatchford Renewable Energy Utility Bylaw (Integrated Infrastructure Services report CR_4358) establishes the Blatchford Renewable Energy Utility and outlines requirements for properties to receive energy service through the utility. The customer rates included in the 2019 Annual Rate Filing have been incorporated into proposed Schedule B of Bylaw 17943.

The *2019 Annual Rate Filing* provided in Attachment 2 of this report establishes the regulatory framework and customer rates for the initial year of operation of the Utility. An external consultant was engaged by Administration to assist in the development of the proposed methodology and customer rates for 2019 based on Blatchford utility customers paying a comparable energy fee to what they would elsewhere in the City of Edmonton through their energy utility bills and annual maintenance costs.

Proposed 2019-2022 Operating and Capital Budgets

The proposed 2019-2022 Operating and Capital Budgets (Attachment 1) incorporate the operating, capital, and financing requirements for the planning, design, construction and operation of the following initial stages of the Blatchford Renewable Energy Utility:

- Ground heat exchanger borefield, Energy Centre No. 1, and distribution piping system (planning & design - 2017; construction - 2018/2019);
- Sewer Heat Recovery Energy Centre (planning & design - 2019 to 2021; construction - 2022/2023); and
- Energy Centre No. 2 (planning & design - 2021; construction - 2023/2024)

On December 8, 2016, City Council approved capital profile 17-02-2107 in the amount of \$19.442 million for the design and construction of the ground heat exchanger borefield, Energy Centre No.1 and distribution piping, with funding from tax-supported debt. Costs in the amount of \$18.011 million were budgeted to be incurred by the end of 2018 for this profile with the remaining \$1.431 million of construction and commissioning costs to be incurred in 2019.

The *Proposed 2019-2022 Capital Budget* in the amount of \$52.839 million includes the previously approved budget amount of \$1.431 million for the completion of Energy Centre No.1 in 2019, \$6.212 million for the preliminary planning and schematic design of the Sewer Heat Recovery Energy Centre and Energy Centre No.2 (capital profile CM-83-8383), and \$22.598 million for the commencement of construction in 2022 of the Sewer Heat Recovery Energy Centre (capital profile CM-83-9000). An additional \$22.598 million is required in 2023 to complete the construction of the Sewer Heat Recovery Energy Centre. Construction of the Energy Centre No. 2 is projected to occur in 2023/2024. These capital costs are based on the current development scenario for the Blatchford development.

The *proposed 2019-2022 Operating Budget* includes operating revenues in the amount of \$0.536 million, \$0.161 million, \$0.445 million and \$0.747 million respectively for 2019 to 2022. Operating revenues are comprised of “Rate Revenue” charged to Blatchford Utility customers based on the proposed rates established in the 2019 Annual Rate filing and “Infrastructure Fee Revenue” which is a one time fee from builders that connect to the Blatchford Utility District Energy System (Residential - \$1,750 per unit; Commercial - \$20 per square meter as included in the proposed Bylaw 17943, Blatchford Renewable Energy Utility Bylaw).

The Proposed 2019-2022 Operating Budget, based on the current projected development pace for the community, includes operating expenditures in the amount of \$2.115 million, \$2.690 million, \$2.634 million and \$2.876 million respectively for 2019 to 2022, which reflects 1.8 FTEs and other external services required to provide operating, maintenance, billing services, marketing and customer support functions. Also included in the 2019 to 2022 operating expenditures are financing costs (interest expense) associated with the \$19.4 million of debt previously approved by Council to fund capital profile 17-02-2107, in addition to \$6.2 million of proposed debt to fund capital profile CM-83-8383 and \$22.6 million of proposed debt to fund capital profile CM-83-9000. As discussed further below, debt financing has been included in the Proposed 2019-2022 Budget since a non-refundable cash infusion has not as of yet been secured to offset the capital investment required in the initial years of operation. Should grant funding become available, it could reduce or negate the need for this debt funding.

The Blatchford Utility Fiscal Policy identifies that a number of years may be required for the Blatchford Utility to begin to generate positive net income, positive cash flows, and transition towards long-term financial sustainability as more residents move into the Blatchford development and become customers of the Utility. This is reflected in the proposed Statement of Operations included in Attachment 1 of this report which projects operating losses for each of the years 2019 to 2022. Further to Section 2.1C of the Fiscal Policy, the Proposed 2019-2022 Budget includes a \$9.5 million short term borrowing from the City of Edmonton in 2019 in order to provide working capital to fund the day to day operations of the Utility in the initial stages of development from 2019 to

2022. This bridge financing (including interest) will be repaid by the Utility in future years subsequent to 2022 as it moves towards financial sustainability and begins to generate positive net income and cash flows (projected to occur in 2025 based on the assumptions included in the Blatchford Utility Fiscal Policy).

Further Considerations

Non-Refundable Cash Infusion

At the March 16, 2016, City Council meeting, the business case for developing the District Energy Sharing System at Blatchford was reviewed (Sustainable Development report CR_2977 District Energy Sharing System - Business Case and Detailed Rate Setting Analysis). The business case identified the need for a \$98 million non-refundable cash infusion for the initial years of operation to offset the capital investment required to establish the utility and allow it to grow over time to achieve financial sustainability (assuming natural gas boilers and cooling towers to meet peaking thermal energy demand). The business case and assumptions were subsequently updated as part of the Blatchford Utility Fiscal Policy presented to City Council on March 22, 2018, resulting in a reduction in the non-refundable cash infusion from \$98 million to \$93 million.

The non-refundable cash infusion is a key element in enabling the Blatchford Renewable Energy Utility to achieve two principles reflected in both the business case and Fiscal Policy: (1) ensure that the utility becomes financially sustainable in the long run without any ongoing subsidy, and (2) ensure customers pay a comparable fee to what they would elsewhere in the City through their energy utility bills and annual maintenance costs.

Administration has had ongoing discussions with the Federal and Provincial governments to pursue grant programs under which the Blatchford Renewable Energy Utility may be eligible. An Expression of Interest was submitted in August 2018 requesting Federal and Provincial funding support under the Green Infrastructure Fund to assist in advancing future stages of the Blatchford Renewable Energy Utility. A response to the City's submission is anticipated in the 1st quarter of 2019.

Since grant funding has not as of yet been secured, the Proposed 2019-2022 Budget includes debt financing to be incurred by the Blatchford Utility for the initial stages of infrastructure investment. However, the Blatchford Utility will ultimately require grant funding or some other form of a non-refundable cash infusion in order for it to be financially sustainable. Without the non-refundable cash infusion, the cost of the Utility's services would become uncompetitive placing an undue burden on Blatchford ratepayers in relation to ratepayers living elsewhere in the City.

If sufficient grant funding is not obtained, other alternatives for the non-refundable cash infusion would need to be considered including the potential use of tax-supported debt or retained earnings from the Blatchford Land Development, or potentially increasing

the infrastructure connection fee or utility customer rates above what is currently allowed under the Blatchford Utility Fiscal Policy.

Blatchford Land Development

The revenues and cash flows projected in the Blatchford Utility 2019-2022 Budget, as well as the long term financial sustainability of the Blatchford Utility, are dependent in part on the progress of the Blatchford land development. The development and operation of the Blatchford Utility is closely connected to the land development and sales activities within Blatchford. The construction of the Utility is being phased to match the Blatchford redevelopment staging. As with any large development project, the community will be developed in stages. An overall staging plan has been established, but the sequence and timing are subject to change depending on market conditions. The development of the Blatchford Utility's infrastructure will follow the overall development schedule. This staging approach will allow the Utility to optimize its investment in additional infrastructure over time and ensure that the Utility system is appropriately sized as each stage is developed.

In accordance with the Capital Project Governance Policy C591 and risk mitigation approach for the Blatchford Utility development, a stand-alone capital profile and detailed business case will be completed and brought forward for City Council's consideration prior to commencing with the construction of the next phase of the Utility buildout included in the Proposed 2019-2022 Budget (i.e. the Sewer Heat Recovery Energy Centre and Energy Centre No.2). Included in the detailed business case will be a further evaluation of the progress of the Blatchford land development and the available capital funding.

2019 Rate Filing

The 2019 Annual Rate Filing (Attachment 2) establishes the regulatory framework and customer rates proposed for the initial year of operation of the Blatchford Utility. The 2019 Rate Filing is guided by the overarching Policy Statement contained in the Blatchford District Energy Utility Fiscal Policy:

“Similar to private utilities, the Utility will account for the cost of services under a full cost accounting approach. All customer charges will be based upon cost of service with the end user (customer) paying at most a comparable fee to what they would elsewhere in the City of Edmonton through their energy utility bills and annual maintenance costs.”

Under a traditional Cost of Service approach, customer rates are established to allow the Utility to recover its annual costs to operate the utility (“revenue requirement”). However, given the small number of Blatchford residents and utility customers in 2019, customer rates established using the Cost of Service approach would result in rates being significantly higher than comparable fees paid elsewhere in the City of

Edmonton, and what Blatchford utility customers could reasonably be expected to incur. Therefore, an alternative method to set customer rates for 2019 and in the initial years of development and operation of the Utility is required.

Administration engaged Grant Thornton to assist in establishing the regulatory framework and identifying and quantifying customer rates using alternative methodologies. The proposed customer rates included in the Blatchford Utility 2019 Annual Rate Filing are based on Grant Thornton's recommendation (Appendix 1 of Attachment 2) to utilize a "pegged" approach to establish customer rates. Under this approach, Blatchford utility bills are pegged to what utility bills would be elsewhere in the City of Edmonton. Grant Thornton recommended the pegged approach for the Blatchford Utility rate design in the initial year over other alternatives since it is simple to implement and to be understood by customers and results in customer rates consistent with the overarching Fiscal Policy statement.

Under the pegged approach, Grant Thornton determined the typical utility bill ("Business as Usual") in 2019 for heating, cooling, and hot water that would be paid elsewhere in the City of Edmonton for the four different classes of residential customers residing in the initial stages of the Blatchford development (Fee-Simple Town House, Strata Town House, 4-6 Story Condo/Apartment, 7-10 Story Condo/Apartment). In accordance with the Fiscal Policy, differences in the annualized maintenance costs to be paid by Business as Usual and Blatchford utility customers were also included as adjustments to the typical Business as Usual bills.

Grant Thornton evaluated alternatives to convert the adjusted Business as Usual bill into variable and fixed Blatchford Utility rates. Grant Thornton recommended a 35 percent/65 percent variable to fixed ratio be used to establish rates since it reasonably mirrors the variable and fixed cost structure to operate the Utility while maintaining fairness to customers in high and low use scenarios. Using the 35 percent/65 percent ratio, Grant Thornton then calculated one variable rate for all Blatchford Utility customers (\$0.0248/kwh) and two separate fixed rates (\$1.43/day for Town House customers; \$1.12/day for Condo/Apartment customers) that result in Blatchford Utility bills being comparable to the adjusted Business as Usual bills for the four different classes of residential customers in 2019.

As discussed above, in the initial years of operation the pegged approach will result in customer rates that are lower than what is required for the Blatchford Utility to recover its annual costs (after taking into account the one time infrastructure fee received from the builders that connect to the District Energy Sharing System). Therefore, Administration is recommending that a deferral account be implemented to accumulate the differences between the revenue collected under the pegged approach and the revenue requirement under Cost of Service until such time as sufficient customers come on line to generate customer revenues that recover the revenue requirement to

operate the Utility (projected to occur in 2025 based on the assumptions included in the Blatchford Utility Fiscal Policy).

As previously discussed, the Proposed 2019-2022 Budget includes debt financing to fund the initial years of capital infrastructure investment since a non-refundable cash infusion has not as of yet been secured. This debt financing results in both interest expense and amortization of capital assets being included in the operating expenditures of the Proposed 2019-2022 Budget. However, for purposes of calculating the revenue requirement and deferral account under Cost of Service in the 2019 Rate Filing, a non-refundable cash contribution for the initial capital investments has been assumed at this time (since customer rates in 2019 are ultimately based on the pegged approach and not the revenue requirement), resulting in no long term interest expense or amortization being incorporated. The 2019 revenue requirement and deferral account under Cost of Service will be amended in future annual rate filings as the availability of the non-refundable cash infusion is further clarified.

Appendix 4 of the 2019 Annual Rate Filing (Attachment 2) provides a number of schedules which detail the revenue requirement for the Blatchford Utility under the Cost of Service approach, the customer revenues and rate design using the pegged approach, and the 2019 deferral account. These schedules utilize very similar format and content to the Minimum Filing Requirements format utilized in the electric and gas utility industry in Alberta.

Future Rate Setting Considerations

The rate setting methodology proposed for the initial year of operation of the Blatchford Utility in 2019, with rates pegged to the typical business as usual utility bill and one variable and two fixed rates being established, is relatively simple to understand and implement. This methodology was chosen in part due to the Blatchford Utility being in the initial stages of development with a relatively small number of customers in 2019.

Grant Thornton has identified a number of future rate setting considerations as the Utility continues to mature and additional information becomes available. These include revisiting the classification of users and further tailoring the rates across customer classes, implementing different rates for heating and cooling, adjusting the rates during the year for seasonality of usage and setting peak rates, and reviewing the continued appropriateness of pegging versus other alternative rate setting methodologies as further information and usage metrics become available.

Public Engagement

Key stakeholders and the general public were engaged in the Blatchford development, including the concept of the Renewable Energy Utility. At this stage of the project, the focus is on creating a bylaw, budget, and customer rates that reflect best practice, achieves the City's goals, and is financially sustainable. Administration has been

meeting directly over the past several months with NAIT to further understand their specific requirements as they will be one of the major customers of the Blatchford Utility.

Corporate Outcomes and Performance Management

Corporate Outcome(s): The City of Edmonton has a resilient financial position			
Outcome(s)	Measure(s)	Result(s)	Target(s)
The City of Edmonton has a resilient financial position	City Asset Sustainability (actual expenditure on capital infrastructure divided by required expenditure)	0.91 (2016)	1.00 (2018)

Risk Assessment

Risk Element	Risk Description	Likelihood	Impact	Risk Score	Current Mitigations	Potential Future Mitigations
Financial	Sufficient non-refundable cash contribution is not received	3 - Possible	3 - Major	9 - Medium	Proper stages of utility buildout and financial planning steps in place, support and review from external experts, funding proposals submitted.	
Financial	Blatchford development is delayed	3 - Possible	1- Minor	3-Low	Adjustment of capital and operating costs based on adjusted development scenario.	
Legal/Regulatory	Blatchford Utility is not properly set up	1 - Rare	1- Minor	1 - Low	Proper legal and regulatory review and planning.	
Project Management	Operation of the Utility is impacted	2 - Unlikely	1 - Minor	2 - Low	Ensure rigorous and planning steps are followed in developing the Utility and prepare for Operation.	

Attachments

1. Blatchford Utility Proposed 2019-2022 Budget

2. Blatchford Utility 2019 Rate Filing (includes Grant Thornton Blatchford Utility Rate Review)

Others Reviewing this Report

- G. Cebryk, Deputy City Manager, City Operations
- P. Ross, Acting Deputy City Manager, Urban Form and Corporate Strategic Development
- C. Owen, Deputy City Manager, Communications and Engagement