

Blatchford District Energy Utility Fiscal Policy C597 Review

Recommendation

That Utility Committee recommend to City Council:

That the Blatchford District Energy Utility Fiscal Policy C597 be amended by adding the rate setting principles outlined in Attachment 1 of the October 2, 2020, Financial and Corporate Services report CR_7760, as the new Schedule A to Policy C597.

Previous Council/Committee Action

At the November 1, 2019, Utility Committee meeting, the following motion was passed:

That Administration review the Blatchford District Energy Utility Fiscal Policy C597 to create more flexibility by refining when to use the pegged rate or a smooth increase, and provide a report to Committee.

Executive Summary

This report recommends changes to the Blatchford District Energy Utility Fiscal Policy to clarify how customer rates are set based on a cost of service methodology and the intent and basis of comparing these customer rates against market to ensure they are reasonable and competitive. Administration considers the overarching Policy Statements included in the Fiscal Policy to still be appropriate, but recommends incorporating specific Rate Setting Principles into the Fiscal Policy to clarify the longer term approach of establishing and comparing customer rates. The proposed Rate Setting Principles for the Blatchford Utility Fiscal Policy are provided in Attachment 1.

Report

At the November 1, 2019, Utility Committee meeting, Administration presented the Blatchford Renewable Energy Utility 2020 Annual Rate Filing, which recommended customer fees and charges effective January 1, 2020 (report CR_7283). The 2020 fees and charges built upon the regulatory framework and customer rates that were first established in the 2019 Annual Rate Filing for the initial year of operation of Blatchford Renewable Energy.

The following overarching policy statement contained in the Blatchford District Energy Utility Fiscal Policy guided the 2019 Annual Rate Filing:

“Similar to private utilities, the Utility will account for the cost of service 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 each year to allow the utility to recover its annual costs of operating the utility. However, given the small number of utility customers in the initial years of Blatchford’s operation, a cost of service approach would result in significantly higher utility fees than those paid elsewhere in Edmonton and what Blatchford utility customers could reasonably be expected to incur. Therefore, an alternative method was implemented to initially establish 2019 customer rates based on a “pegged approach”, whereby Blatchford utility customer bills were set, or “pegged”, based on Edmonton’s typical 2019 utility bills for heating, cooling, and hot water.

Having initially set customer rates for 2019 based on the pegged approach, 2020 rates used a “levelized approach”, consistent with the rate setting methodology in the business case presented to City Council on March 16, 2016 for the development of the District Energy Sharing System at Blatchford. Under the levelized approach, customer rates in the business case are increased by 2.7 percent on average each year over the initial 50 years to ensure stable and consistent rate increases (a key utility rate setting principle). Rates under-recover costs in the early years of the Utility’s operation when the customer base is small, but gradually recover past costs in the later years when the customer base is fully established.

In line with the levelized approach, customer rates recommended in the 2020 Annual Rate Filing and approved by City Council in December 2019 (Bylaw 19062 To Amend Bylaw 17943 Blatchford Renewable Energy Utility) increased the 2019 approved customer rates by 2.7 percent. As noted in the November 1, 2019 Utility Committee report CR_7283, Blatchford Renewable Energy Utility - 2020 Annual Rate Filing, this results in 2020 rates that are:

- comparable to the 2020 rates calculated in the updated business case;
- consistent with the Fiscal Policy that requires stable consistent rate increases;
- relatively simple to understand and implement; and
- lower than rates based on the pegged approach, and therefore in accordance with the Fiscal Policy that customers pay at most a comparable fee to what they would elsewhere in the City of Edmonton.

In reviewing the proposed approach of establishing rates for 2020 and beyond, the Utility Committee raised concerns that the Fiscal Policy as currently written could limit

the ability for setting future customer rates if rates under the pegged approach in a given year were less than the levelized approach rates of 2.7 percent per year. The Utility Committee requested Administration review the policy and return with recommendations to provide more flexibility in the policy to set future rates.

Next Steps

If the recommendation to add the rate setting principles (Attachment 1) is approved by Utility Committee and City Council, then Administration will return with an amended Blatchford District Energy Utility Fiscal Policy C597 for recommendation by Utility Committee and approval by Council in December 2020.

Review of Other Municipally Owned Renewable Energy Systems

Administration reviewed other municipality owned renewable energy systems in developing amendments to the Fiscal Policy. The most comparable energy system is the False Creek Neighborhood Energy Utility (“NEU”) in Vancouver, British Columbia.

The False Creek NEU is a low-carbon district heating system that recovers waste heat from Vancouver’s wastewater system and supplies heat energy for space heating and hot water to mixed-use buildings in the False Creek community. The fundamental goal of the False Creek NEU is to minimize greenhouse gas emissions via a financially self-sustaining, commercially operated utility that delivers competitively priced thermal energy services. In March 2006, Vancouver City Council approved the creation of the False Creek NEU in principle based on a business case that was developed with consulting support from experts in district energy and utility economics, including a levelized approach to set rates with a 3.2 percent increase per year.

Similar to the rate setting process for the Blatchford Renewable Energy Utility, Vancouver City Council approves customer rates annually for the NEU based on a rate filing report submitted by staff. False Creek NEU customer rates are guided by five governance principles (comparable to the Policy Statements in the Blatchford Utility Fiscal Policy), and eight rate-setting principles (Attachment 2). Since the NEU’s initial year of operation in 2010, the annual increase in customer rates has been 3.2 percent based on the levelized approach, which enables the NEU to recover its long-term costs under the commercial utility rate model, while providing stable and competitive energy rates for customers. The rate filing report also includes a comparison of customer rates to other energy providers, in accordance with the False Creek NEU governance principle “that the utility will strive to establish and maintain customer rates that are competitive with the long-term capital and operating costs of other heating options available to customers.”

Refinement of Blatchford District Energy Utility Fiscal Policy

The Blatchford District Energy Utility Fiscal Policy and rate setting approach in the March 2016 business case have guided the methodology used in the 2019 and 2020

Annual Rate Filings to calculate the annual cost of service (“revenue requirement”), and to establish customer rates to recover these costs over the longer term using the levelized approach. Similar to the False Creek NEU as discussed above, the levelized approach of increasing customer rates 2.7 percent annually enables Blatchford Renewable Energy to become financially sustainable in the long run, without ongoing subsidies, by allowing the utility to recover its initial startup costs of providing service over a long term basis as the customer base continues to grow.

Also in accordance with the Blatchford District Energy Utility Fiscal Policy, the 2020 Annual Rate Filing assessed the proposed customer charges based on the levelized approach to ensure that they remain competitive and comparable to fees customers would incur elsewhere in Edmonton in 2020. Further to Utility Committee’s concerns that rates under the pegged approach in a given year could potentially limit setting rates based on the 2.7 percent levelized approach, Administration recommends that multiple years are used for comparison of Blatchford utility customer rates going forward to ensure they remain competitive.

A comparison of customer rates over multiple years reflects the longer term nature of utility infrastructure being used to provide services to customers, and the market fluctuations that may occur annually in the commodity portion of traditional gas and electric utility bills relative to the stable cost of providing thermal energy from the Blatchford District Energy Sharing System. Basing the comparison of Blatchford utility customer rates over a five year rolling average for example (with three years of actual and two years of forecast rates), is also consistent with five year contracts that customers have with retailers of utility services to set rates over a longer term period.

Further to the motion of the Utility Committee on November 1, 2019, Administration also recommends that the Fiscal Policy be amended to clarify how customer rates are set to recover the forecast cost of providing service over a longer term basis under the levelized approach, and the intent of comparing these rates against market to ensure they remain competitive. Administration considers the overarching Policy Statements included in the Fiscal Policy to be appropriate, but recommends adding specific Rate Setting Principles to the Fiscal Policy, similar to the False Creek NEU.

The proposed Rate Setting Principles for the Blatchford Utility Fiscal Policy are provided in Attachment 1. They include applicable, industry best practice, utility rate design principles based on concepts in the book “Principles of Public Utility Rates” by Dr. James Bonbright. The proposed principles also clarify the long term approach to establish and assess customer rates for the Blatchford Utility.

Budget/Financial Implications

A financial and regulatory update for Blatchford Renewable Energy is provided in Attachment 1 of the 2021-2024 Business Plan being presented to the Utility Committee on October 2, 2020 (Integrated Infrastructure Services report CR_8340).

As part of the Blatchford Utility Fiscal Policy presented to City Council on March 22, 2018, a breakdown was provided of the \$660 million capital investment projected for the Blatchford Utility over a 50 year period (report CR_5452, Attachment 2). Of the \$660 million, \$420 million would be paid for by the Utility through customer rates and connection fees, \$147 million of utility infrastructure would be contributed by builders, with \$93 million of non-refundable cash infusions required to fund the initial stages of the infrastructure development over the first ten years.

Since non-refundable cash infusions have not as of yet been secured, self supporting tax guaranteed debt is being used to finance the capital profiles approved by City Council for construction of the geexchange borefield and Energy Centre One (\$19.442 million) and planning and design for the next stage of development of Blatchford Renewable Energy (\$4.972 million). The Blatchford Utility 2019-2022 Budget includes a \$9.5 million short term borrowing from the City of Edmonton in order to provide working capital to fund the day to day operations and debt servicing costs of the Utility in the initial stages of development from 2019 to 2022. This \$9.5 million bridge financing 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. Based on the assumptions included in the Blatchford Utility Fiscal Policy, the Blatchford Utility is projected to generate positive net income and cash flows beginning in 2025. However, as discussed above, this is dependent in part on receipt of the \$93 million non-refundable cash infusion.

Corporate Outcomes and Performance Management.

Corporate Outcome(s): Edmonton is an Environmentally Sustainable and Resilient City			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is an environmentally sustainable and resilient city	Community greenhouse gas emissions (million tonnes of carbon dioxide equivalents)	18.73 (2018)	11.0 by 2035 (35 percent below 2005 levels by 2035)
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	Customer rates generate sufficient revenue to recover the annual cost (revenue requirement) to operate the Utility and begin to recover the under-recovery of costs under the levelized approach in the early years.	TBD	2025
---------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	------

Risk Assessment

Risk Element	Risk Description	Likelihood	Impact	Risk Score	Current Mitigations	Potential Future Mitigations
Financial	Blatchford Utility is financially not sustainable. Substantial external investment is needed.	3 - Possibly	3 - Major	9 - Medium	Communicate and lobby government for external funding, update financial model forecast frequently and engage with Council for any changes.	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 financial 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 Fiscal Policy - Proposed Rate Setting Principles
2. False Creek Neighbourhood Energy Utility - Governance and Rate Setting Principles

Others Reviewing this Report

- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development