

# EPCOR Water Services Inc. - Performance Based Regulation Renewal

## Return on Equity, Efficiency Factor, Fixed/Variable Rate Analysis

### Recommendation

That the December 4, 2020, Financial and Corporate Services report FCS00182 be received for information.

### Executive Summary

EPCOR Water Services Inc. will be submitting performance based regulation applications in February 2021 to establish rates for water services for the period April 1, 2022 to March 31, 2027, and rates for wastewater treatment and drainage services for the period April 1, 2022 to March 31, 2025. In advance of these applications, and further to a motion from Utility Committee on October 14, 2016, EPCOR Water Services Inc. has provided two reports regarding Return on Equity and Efficiency Factor (Attachment 1) and Fixed/Variable Rate Analysis (Attachment 2) for information and feedback from Utility Committee.

### Report

During the October 14, 2016, Utility Committee meeting, a non-statutory public hearing was held to review the performance based regulation (PBR) applications submitted by EPCOR Water Services Inc. (EWSI) to set customer rates for water and wastewater treatment services for the five year period April 1, 2017 to March 31, 2022 (Bylaw 17698 - EPCOR Water Services and Wastewater Treatment Bylaw). At the close of the public hearing, Utility Committee concluded that EWSI should make adjustments to the PBR applications and Bylaw 17698 prior to receiving the appropriate readings from City Council. These adjustments included incorporating an efficiency factor of 0.25 percent and a return on equity of 10.175 percent.

Utility Committee also noted the lack of balanced expert testimony for establishing the appropriate return on equity and efficiency factor. Utility Committee passed a motion on October 14, 2016 that Administration work with EPCOR to establish an appropriate methodology to calculate the efficiency factor as well as possible changes to the customer rate structures to deal with changes in volume in preparation for the next PBR applications to establish rates effective April 1, 2022.

As discussed during the October 2, 2020, Utility Committee meeting (Financial and Corporate Services report CR\_8146), EWSI will be submitting PBR applications in February 2021 to establish rates for water services for the period April 1, 2022 to March 31, 2027, and rates for wastewater treatment and drainage services for the period April 1, 2022 to March 31, 2025. In advance of the PBR applications, and further to the motion on October 14, 2016, EWSI has provided two reports regarding Return on Equity and Efficiency Factor (Attachment 1) and Fixed/Variable Rate Analysis (Attachment 2) for information and feedback from Utility Committee.

### **Return on Equity and Efficiency Factor Review**

EWSI met with Administration and the Utility Advisor on October 23, 2020 to discuss the proposed methodology for setting the return on equity and efficiency factor. Based on a preliminary review, Administration considers the overall approach proposed by EWSI for both the return on equity and efficiency factor to be reasonable. However, the proposed amounts of 10.0 percent and 0.25 percent respectively will require further study. Administration will complete an in-depth assessment of the methodologies and assumptions and provide a recommendation to Utility Committee for the proposed return on equity and efficiency factor as part of its reasonableness review of the PBR applications in mid-2021 (including engaging an external consultant to assist with the assessment).

#### Return on Equity:

As part of its April 1, 2017 to March 31, 2021 PBR applications for water and wastewater treatment services, EWSI proposed a 10.5 percent return on equity based on the expert opinion of Ms. Pauline Ahern, partner with Sussex Economic Advisors, LLC. This was a reduction of 0.375 percent from the previously approved return on equity of 10.875 percent for the April 1, 2012 to March 31, 2017 PBR applications. Ms. Ahern applied three methods to arrive at the recommended return on equity of 10.5 percent and concluded that the 2.2 percent risk premium above the Alberta Utilities Commission's 2013-2015 generic cost of capital of 8.3 percent is a reasonable risk premium. The three methods included the Capital Asset Pricing Model, Discounted Cash Flow, and Risk Premium Model, which were applied both to a US water utility proxy group and a Canadian utility proxy group.

As discussed in Attachment 1, EWSI is proposing a 10.0 percent return on equity for the upcoming PBR applications effective April 1, 2022, based on a new approach that it considers to be the most straightforward and best aligns with previous feedback from Utility Committee. The approach updates the previous analysis completed by Grant Thorton, the consultant engaged to assist in the review of the 2017-2021 PBR applications, to reflect the most recent generic cost of capital determined by the Alberta Utilities Commission (8.5 percent for 2021) and recent bond yield changes.

#### Efficiency Factor:

As part of its April 1, 2017 to March 31, 2022 PBR applications, EWSI submitted evidence prepared by Kaufmann Consulting, a recognized expert in advising utilities and regulatory agencies on efficiency (productivity) factors. While Kaufmann Consulting had recommended a negative 0.50 percent efficiency factor based on evidence that comparable utility industry productivity levels have been less than 0.00 percent, EWSI proposed a 0.00 percent efficiency factor (subsequently amended to 0.25 percent) to demonstrate a continuing commitment by EWSI to its customers to maintain operational efficiency. As part of Administration's reasonableness review of the PBR applications, Grant Thornton concluded a positive efficiency factor was warranted to create an incentive for EWSI to continuously identify opportunities for cost improvement. Grant Thornton recommended that Utility Committee consider a positive efficiency factor other than 0.00 percent, and that in the absence of additional evidence on the matter the 0.25 percent efficiency factor be maintained (0.25 percent was previously approved for the April 1, 2012 to March 31, 2017 PBR applications).

As discussed in Attachment 1, EWSI is proposing a 0.25 percent productivity factor for the upcoming PBR applications for water, wastewater treatment and drainage services effective April 1, 2022. EWSI does not propose to submit another efficiency study from an external consultant as part of its upcoming PBR applications, since it will yield similar results to the previous Kaufmann Consulting report as the underlying industry parameters have not changed since that time.

#### **Fixed/Variable Rate Analysis**

EWSI's Water, Wastewater and Drainage rates are made up of a combination of fixed and variable charges. Based on the rates over the April 1, 2017 to March 31, 2022 PBR term, the current fixed charges generated approximately 15 percent of the total revenue for water services, 17 percent of the total revenue for wastewater treatment, and 55 percent of the total revenue for drainage services.

In Attachment 2 (Table 6), EWSI provides a comparison of water bills for a typical residential customer for 10 communities in western Canada, including the split of the monthly bill to the fixed and variable amounts. The fixed portion of the bill ranged from a low of 0 percent, to a high of 46 percent with the overall average for all communities being approximately 30 percent.

In the upcoming PBR Applications effective April 1, 2022, EWSI proposes to increase the fixed service charges for water and wastewater treatment such that 25 percent of its total revenue will be generated by the fixed charges. Increasing the fixed charges will result in greater revenue stability for EWSI as it reduces the revenue impact of both consumption and customer count variances. In addition, an increase in fixed charges would more closely reflect the fixed/variable split of EWSI's water and wastewater revenue requirement, and would bring EWSI's fixed charges more in line with other communities in western Canada. Higher fixed charges (with lower variable

rates) tend to provide less incentive for customers to conserve water, as they do not notice a meaningful decrease in cost from consuming less water. Higher fixed charges also reduce affordability for low income customers. EWSI believes that the proposed increase to fixed charges are low enough that conservation programs will not be impacted.

**Corporate Outcomes and Performance Management**

<b>Corporate Outcome(s): The City of Edmonton has sustainable and accessible infrastructure</b>			
<b>Outcome(s)</b>	<b>Measure(s)</b>	<b>Result(s)</b>	<b>Target(s)</b>
Ongoing monitoring and reporting of EPCOR utility services regulated by City Council.	Annual and periodic reporting of utility operations.	Annual Progress Report - Water, Wastewater, Drainage (October 2020)  Annual Operational Plan (February 2020)	Annual Progress Report - Water, Wastewater, Drainage (mid-year)  Annual Operational Plan (Q1)

**Attachments**

1. EWSI Performance Based Regulation Renewal - Return on Equity and Efficiency Factor Review
2. EWSI Performance Based Regulation Renewal - Fixed/Variable Rate Analysis

**Others Reviewing this Report**

- B. Andriachuk, City Solicitor