



Appendix P

EPCOR WATER SERVICES INC.

Performance Based Regulation Background

February 16, 2021

Table of Contents

1.0	Introduction	1
2.0	Rate Calculation Principles.....	1
3.0	Performance-Based Regulation Methodology	2
3.1	Cost of Service	2
3.2	Revenue Requirement	2
3.3	Routine Adjustment	3
3.4	Inflation	3
3.5	Efficiency Factor	4
3.6	Special Rate Adjustments.....	4
3.7	Non-Routine Adjustments.....	4
3.8	Off-ramps	5
4.0	PBR Rate Structure.....	5
5.0	Performance Measures and Penalties.....	6
6.0	Annual Reporting and Filing Requirements.....	6

1.0 INTRODUCTION

1. This is a companion document to Schedule 3 of the Water Services Bylaw and the Drainage Services and Wastewater Treatment Bylaw. It is intended to provide an in-depth explanation of the various components of the performance based regulation to enhance the understanding of City Council, the City's Utility Committee and the public.

2. Under EWSI's Performance Based Regulation (PBR), EWSI typically submits an application every five years to its regulator, Edmonton City Council, to extend the PBR methodology for a subsequent five year period. With each five year application, EWSI applies the same general performance based regulation methodology and principles which underpin the Waterworks Bylaw originally developed in 2002. The PBR model was initially approved by Edmonton City Council in 2001 and has been utilized to determine water rates charged to City of Edmonton customers since January, 2002.

3. Beginning with the 2012-2016 PBR term, EWSI incorporated the wastewater treatment operations provided at the Gold Bar Wastewater Treatment Plant into the PBR structure. Drainage Services transferred to EPCOR in 2017 and this PBR Application is its first. Water, wastewater treatment and drainage services are each provided to customers under separate rate structures.

4. EWSI has submitted applications to set rates over the years 2022-2026 for Water Services and 2022-2024 for Drainage and Wastewater Treatment Services. A three year PBR term is proposed for Drainage and Wastewater Treatment in order to establish a staggered schedule for future five-year PBR terms.

5. Section 2.0 of this document presents the principles upon which the PBR Applications have been designed. Section 3.0 provides a high level overview of the operations being funded through the PBR Applications. Section 4.0 describes the rate structure, Section 5.0 describes performance measures and penalties, and Section 6.0 contains the reporting requirements of the PBR.

2.0 RATE CALCULATION PRINCIPLES

6. Water rate standards set by the AWWA and WEF are based upon a number of common principles. The purpose of these principles is to balance the interests of the customers with the

utility. EWSI has set its water wastewater treatment and drainage rates in accordance with these principles.

- Rates are based upon the cost of service.
- No cross-subsidization of rates between customer classes.
- No cross-subsidization of rates between generations of customers.
- Equity of rates to customers who are within a single customer class.
- Rate stability and predictability.

3.0 PERFORMANCE-BASED REGULATION METHODOLOGY

7. EWSI's PBR methodology reflects several key components described below.

3.1 Cost of Service

8. The cost allocation process is based on a Cost of Service Study (COSS). Costs reflects the total amount that must be collected in rates for the utility to recover its prudently incurred costs for maintaining, operating and investing in the utility system plus a fair return on investment.

3.2 Revenue Requirement

9. The components of the revenue requirement are listed in Table 3.2-1.

**Table 3.2-1
Components of the Revenue Requirement**

Item	A Description
1 Operating Costs	Costs broken down by operating cost categories (salaries and benefits, contractors and consultants, power and chemicals, materials and supplies, etc.) and by the different functional areas within Water Services, Wastewater Treatment Services and Drainage Services.
2 Revenue Offsets	Includes revenues for various service charges and fees, penalties and miscellaneous revenues.
3 Taxes and Franchise Fees	Taxes payable by EWSI (property taxes, linear taxes and business taxes) and franchise fees payable to the City of Edmonton
4 Depreciation	Capital assets are depreciated over the shortest of the assets' physical, technological, commercial or legal life. Depreciation expense is a non-cash expense reflecting the portion of a tangible capital asset that is deemed to have been consumed or expired.
5 Interest	The cost for EWSI to service its existing debt and to finance new debt requirements. EWSI's cost of new debt is based on its credit rating of A (low) as assessed by the DBRS credit rating agency.
6 Return on Equity	New capital projects are financed by a combination of debt and equity. Just as debt attracts an interest cost for borrowing, equity investment attracts a cost as well. The regulator determines the fair rate of return that the utility is allowed to earn on their investment in utility assets (rate base). A cost of capital experts recommends the appropriate return on equity for EWSI based on its business and financial risk.

3.3 Routine Adjustment

10. The annual rate adjustment is applied to each class of customer contained in Section 1 of the Water Services Bylaw 17698 and the Drainage Services and Wastewater Treatment Bylaw. Each year, certain components appear as an adjustment to the fixed monthly service charge and/or consumption charge. The categories falling under this heading are inflation, the efficiency factor and special rate adjustments.

3.4 Inflation

11. As set out in Sections 1 and 2 of Schedule 3 to the PBR Bylaw, consumption charges and fixed monthly service charges are adjusted annually by the forecast rate of inflation for the upcoming year plus an adjustment for the difference between actual and forecast inflation rate for the prior year.

3.5 Efficiency Factor

12. As set out in Sections 1 and 2 of Schedule 3 to the PBR Bylaw, the efficiency factor is a reduction to the inflation factor applied to the rates on an annual basis. The efficiency factor reduces the increase in rates to customers. It recognizes that as a business grows, it should become more efficient and the efficiency factor therefore represents the minimum amount by which EWSI must improve operational efficiency to maintain its net income.

13. For 2022-2026, EWSI proposes to maintain the 0.25% efficiency factor as the underlying industry parameters have not changed since its calculation.

3.6 Special Rate Adjustments

14. The special rate adjustments are outlined in Section 2.3 of Schedule 3 of the PBR Bylaw. The special rate adjustments are added to the consumption charge and/or fixed monthly service charge for both water rates, wastewater treatment rates, sanitary rates and stormwater rates. Special rate adjustments are required for increases to rates above inflation and includes a special rate adjustment for re-basing which is required to recover the difference between EWSI's revenue requirement forecast for the PBR term and the revenue that would be realized if annual rate increases were limited to PBR inflation. Other special rate adjustments may be required for programs or initiatives that are in addition to EWSI's core utility operations.

3.7 Non-Routine Adjustments

15. EWSI assumes the risk on all operating and capital related costs. However, there are cost factors that are beyond the control of EWSI. In the rare or unlikely situations where these factors result in a significant impact to EWSI, these costs can be passed through to customers based on City of Edmonton Council or City Manager approval. If EWSI anticipates making a request for one or more non-routine adjustments, EWSI will submit its request for non-routine adjustments to the City Manager, and will include with such request sufficient information to enable the City Manager / City Council to evaluate and approve the request, if appropriate.

16. Where a non-routine adjustment is very significant in size, it may be charged to Adjustment Deferral Account. The purpose of this is to minimize the financial impact that this could have on customers or EWSI and promote rate stability over time. The Adjustment Deferral Account balance will be treated as a working capital item.

17. EWSI will recover/credit that cost over a reasonable time frame through an adjustment to the fixed monthly meter charge in Schedule 1 of the Water Services Bylaw and the Drainage Services and Wastewater Treatment Bylaw.

3.8 Off-ramps

18. In the event that this performance-based regulation does not work in the way EWSI and its regulator intended, then the performance-based regulation can be terminated with the mutual consent and agreement of both parties prior to the expiration of its term.

19. In the event of termination of the performance-based regulation, it is necessary to wind-down the plan. Any balance of the Adjustment Deferral Account must be cleared within a one-year period from the date of termination.

4.0 PBR RATE STRUCTURE

20. EWSI's in-city customers pay both a consumption charge and a fixed monthly service charge. The fixed charge recovers costs that are directly attributable to a customer including the cost of the water meter, customer service and billing. The consumption charge captures all the costs of operations, maintenance, administration and capital investment associated with operating the water, wastewater or drainage utility.

21. **Water Services** includes the production, treatment and supply of potable water to a customer, for which EWSI charges water rates. **Wastewater Treatment Services** includes the treatment of wastewater and the storage, pumping and disposal of treated wastewater, for which EWSI charges wastewater treatment rates. **Drainage Services** includes operation of the sanitary, stormwater and combined sewer systems.

22. Customers are categorized into three rate classes for the purpose of determining which specific water rate applies to each customer. The water rate classes include: Residential, Multi-residential and Commercial.

23. Table 4.0-1 provides an overview of the rate structure for Water Services, Wastewater Treatment Services and Drainage Services.

**Table 4.0-1
EWSI Rate Components**

	A Water	B Wastewater	C Stormwater	
1	Consumption Charges	Consumption Charges	Consumption Charges	
2	Fixed Monthly Service Charges	Fixed Monthly Service Charges	Fixed Monthly Service Charges	Fixed Monthly Service Charges based on Stormwater Equivalent
3	Rate Riders	Wastewater Overstrength Surcharges		
4	Miscellaneous Service Charges			

5.0 PERFORMANCE MEASURES AND PENALTIES

24. The water system service quality measures, wastewater treatment service quality measures and drainage service quality measures reflect the results of EWSI's operational performance. These measures ensure that EWSI does not compromise customer service levels as it seeks to identify cost saving opportunities during the PBR period.

25. Drainage, Water and Wastewater individually have a 100 point benchmark. Total points are determined by the summation of points available for each performance measure. In the event that service or quality drops below a benchmarked standard, EWSI is financially penalized and that penalty amount is refunded to customers through a rebate on their water, wastewater treatment or drainage bill.

6.0 ANNUAL REPORTING AND FILING REQUIREMENTS

26. **Annual Rate Filing** - On March 1st of the year following the reporting year, EWSI will file with its regulator, the City of Edmonton, an *Annual Water, Wastewater Treatment and Drainage Rate Filing*. The filing will contain five parts:

- An audit report - An accountant will review the Annual Water, Wastewater Treatment and Drainage Rate Filing, conduct an audit and prepare an audit report in accordance with the recommendations contained within Section 5805 of the Canadian Institute of Chartered Accountants Handbook, as amended from time to time.
- Rates Sheets - The water rate and wastewater treatment rate forecast for each customer class of service for the period following the reporting period; and,
- Water System Service Quality Results - The results of each of the components of the water system service quality indices.

- Wastewater Treatment Service Quality Results - The results of each of the components of the wastewater treatment service quality indices.
- Drainage Services System Quality Results – The results of each of the components of the drainage system service quality indices.

27. **Annual Operating Plan** – An Operating Plan is presented to Utility Committee early each year. The intent of the plan to provide Utility Committee, City Council and stakeholders an understanding of the major operational initiatives being undertaken by the Utilities.

28. **Annual Progress Reports** - A PBR Progress Report to City Council, outlining in detail EWSI's performance in the prior year with regards to its operational performance against its service quality standards, its financial results for the year compared to the PBR plan, and opportunities and challenges expected in the upcoming year. An update of progress on initiatives from the Annual Operating Plan is also included.

29. **Minimum Filing Requirements** - In March 2013, City Council approved EWSI's proposed Minimum Filing Requirements (MFR) to be used for the next PBR application. The MFR includes both financial and non-financial filing requirements and takes guidance from the Alberta Utilities Commission MFR. The intent of EWSI's MFR is to provide: (i) greater visibility and transparency; (ii) improved consistency and comparability in terms of structure and format of application consistent with filings by other regulated entities in Alberta; and (iii) better functionality in terms of decision-useful information in a readily extractable form.