



## **Appendix N**

### **EPCOR WATER SERVICES**

#### **Performance Based Regulation Background**

**May 31, 2024**

## **1.0 INTRODUCTION**

1. This is a companion document to Schedule 3 of the Wastewater Services 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 EWS' Performance Based Regulation (PBR), EWS 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, EWS 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, EWS incorporated the wastewater treatment operations provided at the Gold Bar Wastewater Treatment Plant into the PBR structure and beginning with the 2022-2024 PBR term, EWS incorporated the wastewater collection operations (also known as drainage services) into the PBR structure. Water, wastewater treatment and wastewater collection services are each provided to customers under separate rate structures.

4. EWS has submitted applications to set rates over the years 2025-2027 for Wastewater Collection and Wastewater Treatment Services. A three-year PBR term is proposed for Wastewater Collection and Wastewater Treatment services to align the timing for a consolidated PBR application for Water, Wastewater Collection and Wastewater Treatment services in 2028 with a one year extension of the Water PBR in 2027.

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 and Wastewater 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. EWS continues to set its water, wastewater treatment and wastewater collection 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. EWS' 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 reflect the total amount that must be collected through rates for the utility to recover its prudently incurred costs for maintaining, operating and investing in the utility system plus earn 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 Wastewater Collection Services.
2 Revenue Offsets	Includes revenues for various service charges and fees, penalties and miscellaneous revenues.
3 Taxes and Franchise Fees	Taxes payable by EWS (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 EWS to service its existing debt and to finance new debt requirements.

Item	A Description
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 EWS 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 Wastewater Services Bylaw 20865. 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 Wastewater Services 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 Wastewater Services 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 EWS must improve operational efficiency to maintain its net income.

13. For the 2025-2027 PBR term, EWS 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 Wastewater Services 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 EWS' 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 EWS' core utility operations.

### **3.7 Non-Routine Adjustments**

15. EWS assumes the risk on all operating and capital related costs. However, there are certain cost factors that are unusual in nature and beyond the scope of control of EWS. In such situations where the unusual factors result in a significant impact to EWS, costs can be passed on to customers upon receiving City Council or City Manager approval. If EWS anticipates making a request for one or more non-routine adjustments, EWS will submit its request 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.

16. All amounts approved as a non-routine adjustment are funded on an interim basis and charged to EWS' Adjustment Deferral Account for Water, Wastewater Treatment or Wastewater Collection as applicable. The purpose of this is to minimize the financial impact non-routine adjustments could have on customers or EWS and promote rate stability over time. The Adjustment Deferral Account balance will be treated as a working capital item.

17. EWS will recover/credit the deferral account balance over a reasonable time frame through an adjustment to the fixed monthly meter charge in Schedule 1 of the Water Services Bylaw and the Wastewater Services Bylaw.

### **3.8 Off-ramps**

18. In the event that this performance-based regulation does not work in the way EWS 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. EWS' 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 treatment or wastewater collection utility.

21. **Water Services** includes the production, treatment and supply of potable water to a customer, for which EWS charges water rates. **Wastewater Treatment Services** includes the treatment of wastewater and the storage, pumping and disposal of treated wastewater, for which EWS charges wastewater treatment rates. **Wastewater Collection 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 and wastewater rate applies to each customer. The 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 Wastewater Collection Services.

**Table 4.0-1**  
**EWS Rate Components**

	A Water	B Wastewater Treatment	C Sanitary	D 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 wastewater collection service quality measures reflect the results of EWS'

operational performance. These measures ensure that EWS does not compromise customer service levels as it seeks to identify cost-saving opportunities during the PBR period.

25. Water, Wastewater Treatment and Wastewater Collection individually have a 100 point benchmark. Total points are determined by the summation of points available for each performance measure. When service or quality drops below an established standard, EWS is financially penalized, and that penalty amount is refunded to customers through a rebate on their water, wastewater treatment or wastewater collection utility bill.

## **6.0 ANNUAL REPORTING AND FILING REQUIREMENTS**

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

- An audit report - An independent internal or external accountant will review the Annual Water, Wastewater Treatment and Wastewater Collection 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.
- Wastewater Collection Services System Quality Results – The results of each of the components of the wastewater collection system service quality indices.

27. **Annual Progress Reports** - A PBR Progress Report to City Council, outlining in detail EWS' 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.

28. **Minimum Filing Requirements** - In March 2013, City Council approved EWS' 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 EWS' 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.