



Financial & Corporate Services Financial Services

Edmonton

EPCOR Water Services Inc. Wastewater Services Performance Based Regulation (PBR) Application (2025-2027)

Reasonableness Review

FCS02677 - ADMINISTRATION REVIEW OF EPCOR WATER SERVICES 2025-2027
PERFORMANCE BASED REGULATION APPLICATION FOR EPCOR WASTEWATER
TREATMENT AND WASTEWATER COLLECTION

Agenda

- Summary
- Cost of Service & Rates Design
- Cost of Capital
- Efficiency Factor
- Performance Measures
- Next Steps

Summary

- EPCOR Water Services Inc. Wastewater Services Performance Based Regulation (PBR) Application (2025-2027)
 - ◆ Wastewater Treatment & Collection (Sanitary & Stormwater) Utility Rates
 - April 1, 2025 to December 31, 2027
 - Planned Consolidated PBR (January 1, 2028)
 - ◆ Bylaw 20865 - EPCOR Wastewater Services Bylaw

Summary

→ Proposed Billing Impacts

	2025	2026	2027	Total (\$)/ Average (%)
Wastewater Services Bill Impacts on the Average Residential Customer				
Annual Combined Average Monthly Bill - \$	74.55	76.91	79.44	
Change in Bill - \$	1.70	2.36	2.53	6.59
Change in Bill - %	2.3%	3.1%	3.2%	2.9%
Wastewater Services Bill Impacts on the Average Multi-Residential Customer				
Annual Combined Average Monthly Bill - \$	1,298.59	1,342.02	1,383.12	
Change in Bill - \$	(63.86)	43.43	41.10	20.67
Change in Bill - %	-4.7%	3.2%	2.9%	0.5%
Wastewater Services Bill Impacts on the Average Commercial Customer				
Annual Combined Average Monthly Bill - \$	546.19	570.14	593.91	
Change in Bill - \$	(29.07)	23.95	23.77	18.65
Change in Bill - %	-5.1%	4.0%	3.8%	0.9%

→ Recommendations

- ◆ 2025-2027 PBR Application (Attachment #9)
- ◆ Next PBR Application (Attachment #10)

Cost of Service & Rates Design

→ Key Points

- ◆ Ensure that expenses are appropriately incurred by the Utility for the purposes of providing utility services
- ◆ Ensure that expenses are appropriately allocated to the customer classes receiving the benefit of utility services
- ◆ Ensure utility rates are appropriately determined and charged in an equitable manner based on cost of service

→ Potential Utility Ratepayer Risks

- ◆ Being charged/overcharged for irrelevant costs
- ◆ Subsidizing other customer classes

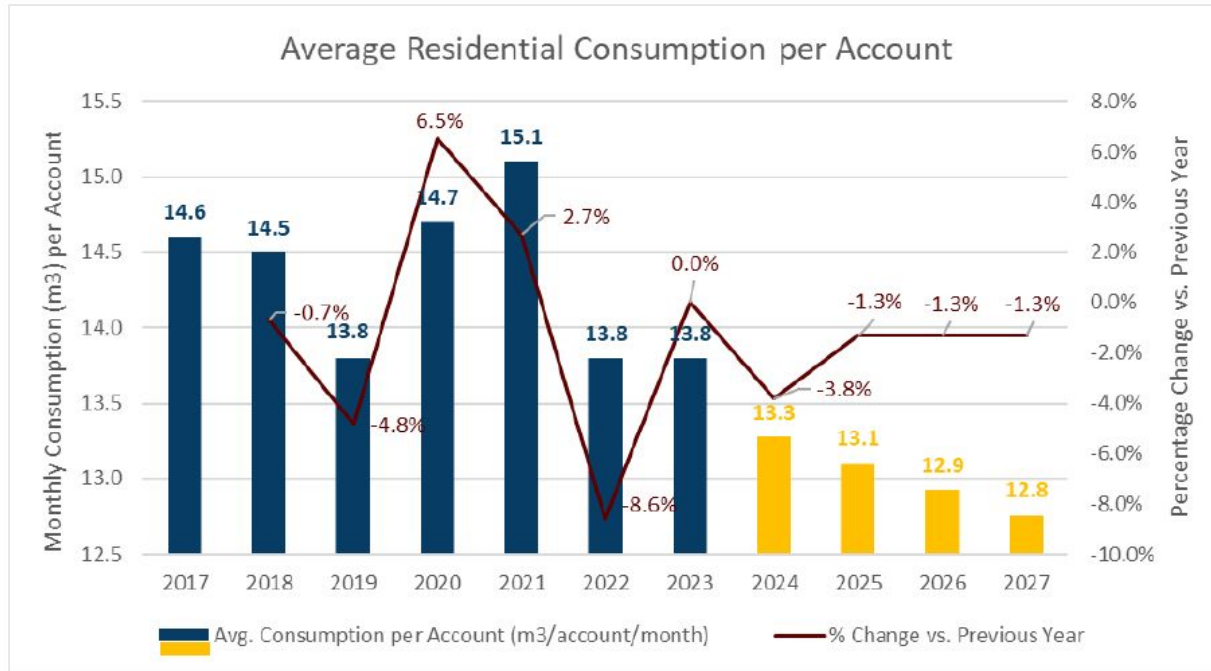
Cost of Service & Rates Design

→ Customer Consumption Forecasts

Year	Type	Avg. Residential (m3/month)	Change (Prior Year)
2024	Forecast	13.3	(3.8%)
2025	Forecast	13.1	(1.3%)
2026	Forecast	12.9	(1.3%)
2027	Forecast	12.8	(1.3%)

Cost of Service & Rates Design

→ Customer Consumption Forecasts (cont.)



Cost of Service & Rates Design

- Customer Consumption Forecasts (Cont.)
 - ◆ Recommendations for the 2025-2027 PBR Application
 - Supporting analysis for the 1.3% decline in average residential consumption
 - Supporting analysis for a revised/reasonable 2024 forecast estimate
 - Updated utility rates for the PBR term

Cost of Service & Rates Design

- Customer Consumption Forecasts (cont.)
 - ◆ Recommendations for the Next PBR Application
 - Review and revise statistical analysis used to forecast future average consumption trends
 - Factor in differences in residential and multi-family indoor usage relative to outdoor irrigation usage

Cost of Service & Rates Design

→ Historical Financial Results

- ◆ Only one year of actual financial results (2022) was provided by EPCOR
 - Best practice is to provide multiple years of results
 - Restricts assessing the appropriateness of forecasts

Cost of Service & Rates Design

- Historical Financial Results (cont.)
 - ◆ Recommendation for the Next PBR Application
 - Sufficient historical actual financial results are provided for future PBR applications as per EPCOR's existing minimum filing requirements

Cost of Service & Rates Design

→ Depreciation Study

- ◆ Reduce average service lives of capital assets
 - Wastewater Treatment - 23.4 years from 25.6 years
 - Wastewater Collection - 40.0 years from 42.6 years
- ◆ Increase depreciation expense over the PBR term and beyond for new assets starting in 2025
- ◆ Depreciation study lacks benchmarking data
- ◆ Potentially overcharge utility customers over the PBR term

Cost of Service & Rates Design

→ Depreciation Study (cont.)

- ◆ Recommendations for the 2025-2027 PBR Application
 - Conduct benchmarking study
 - Calculate utility rates for the PBR term using existing asset lifetimes and depreciation schedules
- ◆ Recommendation for the Next PBR Application
 - EPCOR to include benchmarking data in future applications

Cost of Service & Rates Design

- Cost of Service Methodology (Rate Design)
 - ◆ Aligns with generally accepted rate-setting methodologies & leverages industry practices
 - ◆ Did not consider specific information for wastewater treatment and collection systems

Cost of Service & Rates Design

→ Cost of Service Methodology (Rate Design) (cont.)

◆ Recommendations for the Next PBR Application

- Calculation of wastewater return factors by customer class
- Consider cost of service to Hauled Wastewater customers & University of Alberta
- Costs involved with ARROW's wastewater "swaps"
- Assessment of the impacts of inflow and infiltration
- Rationale for how costs are functionalized, allocated into cost drivers, and distributed across customer classes

Cost of Service & Rates Design

→ Billing Comparisons

- ◆ There is a need for separate assessments of wastewater and stormwater rates and a focus on comparable utilities.
- ◆ Winnipeg is the only city with a higher projected residential monthly wastewater bill than Edmonton
- ◆ Edmonton's residential monthly stormwater bill is expected to be higher than all others.

Cost of Service & Rates Design

→ Billing Comparisons (cont.)

- ◆ Recommendations for the Next PBR Application
 - ◆ Separate rate benchmarking reports for Water, Wastewater, and Stormwater
 - ◆ Jurisdictional peer group should include similarly sized cities with their own water and wastewater treatment plants
 - ◆ Identify opportunities for efficiencies to ensure ratepayers are provided increased value for money relative to other jurisdictions

Cost of Capital

→ Key Points

- ◆ Ensure return on equity reflects the appropriate business risk and considers economic conditions
- ◆ Ensure return on debt reflects the true cost of borrowing

→ General Comments

- ◆ Equity thickness - 60% debt/40% equity is appropriate
- ◆ Proposed Cost of Debt lacks support relative to best practice

→ Potential Utility Ratepayer Risks

- ◆ Business risk being inappropriately transferred to the ratepayer
- ◆ Being overcharged due to higher than needed rate of returns

Cost of Capital

→ Return on Equity (ROE)

- ◆ Proposed ROE for the PBR term:
 - Wastewater Treatment - 10.8%
 - Wastewater Collection - Ramp up to 10.8%
 - 2025 - 9.0% (1.3% increase)
 - 2026 - 9.9% (0.9% increase)
 - 2027 - 10.8% (0.9% increase)

- ◆ Comparison against proxy group of Canadian utility companies and US water utilities

- ◆ The Alberta Utilities Commission (AUC) notes that U.S. companies have higher business risks

Cost of Capital

→ Return on Equity (ROE) (cont.)

- ◆ Variety of traditional calculation methodologies to determine the ROE
- ◆ ECAPM (Empirical Capital Asset Pricing Model)
 - Not used in recent Canadian regulatory decisions
- ◆ Resulted in a recommended ROE range between 10.5% to 12.2%

Cost of Capital

→ Return on Equity (cont.)

	Current PBR 2025-2027 (Proposed)	Prior PBR 2022-2024 (Approved)	Difference
EWSI ROE	10.80%	9.89%	0.91%
AUC Approved ROE	9.28%	8.50%	0.78%
Difference	1.52%	1.39%	0.13%

- ◆ No additional risks or considerations have been identified to support the increase of 0.13% in risk spread
- ◆ EPCOR's equity thickness is 40% compared to 37% for AUC regulated utilities resulting in a higher effective return before factoring in the ROE and risk spread

Cost of Capital

→ Return on Equity (cont.)

- ◆ No consideration of varying risk profiles of Water, Wastewater Treatment and Wastewater Collection
- ◆ Revenues will likely be generated from unbilled Stormwater customers
 - Forecasts do not include unbilled stormwater revenues
 - As a result proposed utility rates are higher than required, further reducing business risk

Cost of Capital

→ Return on Equity (cont.)

◆ Recommendations for the 2025-2027 PBR Application

	Return on Equity
Proposed	10.80%
Adjust for removal of ECAPM methodology	(0.09)%
Revised	10.71%
Reduction to align with prior AUC risk spread consistent with 2021 PBR	(0.04)%
Revised (Starting Point)	10.67%
Adjust for lower risk premium for Wastewater Collection and Treatment compared to Water	(0.18)%
Recommended	10.49%

Cost of Capital

→ Return on Equity (cont.)

- ◆ Recommendations for the 2025-2027 PBR Application (Cont.)
 - Adjust the proposed ROE to 10.49% from 10.80% and reflect the impact in utility rates
 - Continue the ramp-up approach for Wastewater Collection using 10.49% as the proposed ROE
 - 2025 - 8.65%
 - 2026 - 9.57%
 - 2027 - 10.49%

Efficiency Factor

- Proposed Efficiency Factor - 0.25% (same as prior PBR)
- Integration of Wastewater Collection as part of the “One-Water” approach is still ongoing with full integration not expected until 2028 as part of consolidated PBR application. Examples include, but are not limited to:
 - ◆ EPCOR was only able to provide one year of financial actuals for 2022 due to organizational restructuring.
 - ◆ EPCOR has yet to analyze or create comprehensive rates across Water, Wastewater and Stormwater.

Efficiency Factor

- ◆ Rates do not factor in the impact of potential unbilled Stormwater customers
- ◆ Wastewater Collection's operating cost structure has a higher allocation of shared and corporate shared services costs compared to Wastewater Treatment
- ◆ The consistent exceedance of performance standards suggests that EPCOR may have incurred incremental costs to do so
- ◆ Based on the jurisdictional billing comparison analysis, it is predicted that EPCOR will have higher-than-average utility rates, especially for Stormwater

Efficiency Factor

- Recommendations for the 2025-2027 PBR Application
 - ◆ An increase to the efficiency factor to 0.50 per cent for Wastewater Collection over the PBR term while integration towards “One-Water” continues
- Recommendations for the Next PBR Application
 - ◆ EPCOR provide updated analysis regarding capital and operating efficiencies gained through the “One-Water” integration over the PBR term.

Performance Measures

→ Key Points

- ◆ Appropriate service levels are determined and met in a cost effective manner
- ◆ Appropriate performance measures are established to drive outcomes
- ◆ Tools are to be in place for proper monitoring.

→ Potential Utility Ratepayer Risks

- ◆ Misalignment between operations and performance measures, making it difficult to determine if value is being provided relative to the cost

Performance Measures

- Role of Regulator in Establishing Performance Measures
 - ◆ Currently EPCOR proposes measures and standards to the Utility Committee for review
 - ◆ Generally, in other regulatory settings, the regulatory authority takes a lead role in establishing performance measures
 - ◆ Opportunity for Utility Committee (as regulator) to have greater influence in establishing the performance measure process and methodology

Performance Measures

- Role of Regulator in Establishing Performance Measures (cont.)
 - ◆ Recommendation for Action by Utility Committee (supported by Administration) in advance of next PBR application
 - Review the regulatory process for establishing and directing performance measures, including the roles of the parties involved (i.e. Utility Committee, Administration, EPCOR) and factor in leading practice considerations from applicable regulatory agencies

Next Steps

Date	Process
October 11, 2024 (Utility Committee)	<ul style="list-style-type: none">● Utility Committee makes recommendations for changes to PBR application● Bylaw referred back to Administration & EPCOR to update based on recommendations
Date TBD (Utility Committee) <i>Must be before April 1, 2025</i>	<ul style="list-style-type: none">● EPCOR returns with compliance filing incorporating changes directed by Utility Committee to PBR application● Bylaw updated with revised rates (2025-2027)● Utility Committee recommends Bylaw to be sent to Council for approval
Date TBD (Council) <i>Must be before April 1, 2025</i>	<ul style="list-style-type: none">● Bylaw received 3 readings
April 1, 2025	<ul style="list-style-type: none">● Wastewater rates for 2025-2027 become effective

Questions?

The logo for the city of Edmonton, featuring the word "Edmonton" in white text on a blue square background. The background of the slide is a faded, golden-brown image of a large, modern building with a curved roof, surrounded by trees with autumn foliage.

Edmonton