

EWSI's objectives for public engagement and communications throughout this process are to:

- Have public and stakeholder input inform policy choices and to support priority setting for operations and capital programs, performance measurement and rate design.

Based on EWSI's past practice, the discussion will likely be focused on four topic areas:

- **Values** - Understanding the values held by stakeholders and using these to guide the evolution of the utilities including the performance measures in the PBR.
 - **Performance Priorities** - Understanding the types of performance most valued by stakeholders, and the level of performance they are seeking, to guide the prioritization of capital and operating programs.
 - **Cost and Risk Sharing** - Understanding stakeholder views on how costs and risks should be shared between ratepayers, service recipients, insurers, government and the utilities, and using these views as an input to guide rate design and future communications;
 - **Rates** - Understanding stakeholder views on the cost and benefit trade-offs from different levels of investment in Edmonton's drainage and wastewater systems, and their preferences for future rates.
- Provide stakeholders with opportunities to ask questions, express concerns and raise issues with respect to the PBR renewal and their utility services;
 - Maintain positive and productive relationships with the key decision makers and stakeholders throughout the PBR development and implementation; and
 - Report back to stakeholders as the PBR renewal process progresses on how their feedback was used by EWSI.

3.2 Rate Structure and Design Review

Financial regulation is intended to ensure "Just and Reasonable Rates" that are fair to both consumers and the utility¹. For the utility, fairness means that rates must allow the utility the opportunity to recover, over the long run, its prudently incurred operating and capital costs², including a fair return on capital employed in the provision of utility services (collectively, the utility's revenue requirement). At the most basic level, rates are designed to fully fund the utility's activities while, at the same time, not over-collecting revenue. For consumers, fairness means that rates are based on the cost of the services that they receive. Rates are considered

¹ In Canada, this standard was defined in *Northwestern Utilities Ltd. v. City of Edmonton*, 1929 CanLII 39 (SCC), [1929] S.C.R. 186, at pp. 192-93, per Lamont J.

² In Alberta, the prudently-incurred cost standard is derived from EUB Decision 2001-110 and AUC Decision 3585-D03-2016. Although City Council is not bound by these decisions, these decisions provide guidance and direction.

fair and equitable when each customer class pays the costs allocated to the class based on their level of use of the waterworks system and when subsidization from one class to another is avoided.

While recovery of the full revenue requirement in a fair and equitable manner is a key objective, other objectives such as rate structure and design, or the manner in which rates are charged are also considerations. Some factors that can be considered when designing rates include:

- Rates that are easy to understand from the customers perspective;
- Rates which are cost effective for the utility to administer;
- Continuity, over time, of the rate making philosophy;
- Policy considerations (encourage efficient use of resources, economic development, etc.);
- Provide revenue stability from month to month and year to year;
- Promote efficient allocation of the resources;
- Equitable and non-discriminatory (cost based)

EWSI is currently reviewing the rate structures for all three utilities and intends to provide that analysis along with a series of recommendations to the Utility Committee for consideration. These recommendations will also be subject to customer and stakeholder engagement prior to the submission of the application. The rate review will evaluate the current rate levels and design on a number of dimensions. The review will start with determining whether cross subsidization exists between one customer class and another. In other words, whether changes in consumption patterns since the rates were originally set results in one customer class benefiting from lower rates than they should based on their cost of service (and other classes subsidizing those lower rates through paying higher rates than they should based on their cost of service). The review will then extend to compare the current rate structures and designs to the contemporary rate design approaches used by other utilities. The manner in which these designs achieve broader policy objectives and support planned advancements and changes in the overall system (such as stormwater management programs) will also be considered.

Lastly, a plan to address the known administrative challenges will be developed. These challenges exist mainly in the stormwater utility and existed prior to the transfer of Drainage Services to EPCOR. These challenges include unverified agreements made prior to the transfer that ostensibly exempt some customers from payment, inconsistencies in charges across customer classes as well as charging City of Edmonton properties for stormwater services. Based on the premise that all customers should contribute to the stormwater system based on their use of that system, EWSI believes these challenges should be discussed and solutions developed for discussions with customers and the Utility Committee.

As rate design has a direct impact on ratepayers, the Public Awareness and Stakeholder Engagement plan will have a component for rate design review. This is anticipated to entail reviewing any alternative rate design with ratepayers for their feedback and addressing their feedback in the application.

3.3 Deferral Account Analysis (Motion)

At the conclusion of the 2022-2024/26 PBR Application review, Utility Committee issued a motion to review the use of “*deferral accounts and other adjustments mechanisms to deal with variations in usage.*” In response, EWSI will provide Utility Committee with an analysis assessing the benefits and drawbacks for the continued use of deferral accounts.

As background, deferral accounts are used in some regulatory jurisdictions to address risk. All cost and revenue forecasts within a PBR application are subject to forecast risk as the final actual results will be either higher or lower than the initial forecasts. Historically, the PBR has been structured so that EWSI assumes all forecast risk. The end-result of this approach is rate-payers have stable and predictable rates while EWSI receives an increased return on equity to compensate for the risk transferred to EWSI from customers. With some deferral accounts, such as the current EWSI consumption deferrals, variances between forecast and actuals are tracked separately and either charged to or refunded to rate-payers at a future point in time (as opposed to being borne by the utility). The end-result of this approach is that utility assumes a lower level of risk while the rate-payer is subject to greater price volatility.

Until the 2022-2024/26 PBR Applications, EWSI has never had a deferral account included in the final Bylaw. As the 2022-2024/26 applications were developed during the COVID pandemic, the consumption forecasts were developed based on information that displayed a wide divergence from historic norms (i.e. the general impact was a significant decrease in commercial consumption with significantly higher residential consumption). As the forecast risk was considered greater than historic levels (as it contained both the normal volume forecast risk in addition to the element of the timing of a return to normal consumption patterns), the temporary introduction of consumption deferral accounts was directed by the Utility Committee for all three utilities. The deferral accounts were intended to prevent under or over earning by the utilities based on the forecast risks. The awarded return on equity was correspondingly reduced by 0.25% in order to adjust for the utilities reduction in risk.

As defined by the motion, EWSI will provide a review of the implications of the continued use of deferral accounts. This review will be both from the perspective of the utility as well as the impact of the subsequent rate adjustments on the rate-payer. This topic will also be reflected

into the Public Engagement plan, with customer and stakeholder feedback incorporated into the applications.

3.4 Developer Funding Review

Capital investments required to support both new greenfield and infill development across the city are allocated between developers and ratepayers differently across EWSI's various utilities. For water infrastructure, green-field costs are generally shared between developers and ratepayers with rate-payers paying for "backbone" assets such as treatment and transmission infrastructure as well as reservoirs. Developers are responsible for distribution level infrastructure that is generally added to lot prices. For infill development, developers have historically been responsible for all costs. For drainage assets, developers cover the majority of costs for new greenfield infrastructure and limited costs for infill. (Note – in the provincially regulated electrical system, ratepayers cover the majority of costs for electrical infrastructure).

EWSI has had discussions with developers to understand the historic rationale for these differences as well as the issues that the disparity in approaches causes. The scope of the discussion was originally limited to greenfield development. More recently, discussion regarding infill has been included given its increasing importance in the City Plan (one initiative that was an outcome of these reviews is the infill fire protection program in the current water PBR).

EWSI intends to continue these discussions, assess alternatives and bring a summary report to Utility Committee. As part of that assessment, different approaches are being reviewed with the goal of determining whether a more consistent framework for allocating costs of development between developers and ratepayers is required. Several objectives are included in the assessment including determining which approaches result in overall long-run cost minimization. Additional considerations would be the degree to which cost allocation and regulatory principles necessary to fund water and drainage infrastructure required to support growth are met. Considerations for transparency, predictability, stability and cost effectiveness of administration will also be included. A jurisdictional review will be completed and the approaches utilized in other jurisdictions assessed based on the established principles. The report will also include a discussion of how different funding models would impact the competitiveness of utility rates and developer costs with other municipalities.

3.5 Cost of Capital (Return on Equity) Review

"Cost of Capital" is a fundamental concept in both financial theory and public utility regulation. At the highest level, cost of capital is an opportunity cost, meaning that investing in any asset (or security) implies a foregone opportunity to invest in an alternative asset (or security). For

any investment to make financial sense, the expected return of that investment must be equal to the return available in other investments assuming that both investments are of comparable risk. Because investments with similar risks should offer similar returns, the opportunity cost of an investment should equal the return available on an investment of comparable risk. The higher (or lower) the risk, the higher (or lower) the investor's expected return.

From a utility perspective, total cost of capital is a central component of the revenue requirement. In most instances, the total cost of capital is the combination of the cost of debt, the cost of common equity and the capital structure (how much funding comes from debt and how much from equity). The rate of return is developed from the cost of capital by weighting each of these components by the allowed capital structure to derive the weighted average cost of capital (WACC)³. Generally, regulators focus their reviews on the cost of equity and the capital structure while debt rates are generally determined by financial market information.

Under the PBR's constructs, EWSI is allowed to recover the operating expenses and depreciation deemed reasonable in the PBR approval process as well as a fair return on the assets utilized in providing service to rate-payers. In the past, EWSI followed the same approach seen in other regulatory jurisdictions by providing an external opinion for the proposed common equity costs in the application. These reports tend to be highly technical as they are based on the application of three market-based cost of common equity models, the Capital Asset Pricing Model ("CAPM"), Discounted Cash Flow Model ("DCF") and the Risk Premium Model ("RPM"), to the market data of a U.S. water proxy group and a Canadian utility proxy group.

EWSI and its external expert have also historically provided a comparison of the proposed return on equity to the Alberta Utilities Commission (AUC) generic cost of capital. In the 2017-2021 PBR application, both EWSI's cost of capital expert and Grant Thornton, the City's expert, recognized that EWSI's risk is greater than the gas and electric utilities regulated by the AUC. EWSI's expert concluded that water and wastewater treatment utilities experience greater levels of business risk relative to natural gas and electric utilities⁴. Grant Thornton indicated that their evidence of greater business risk was conflicting and could not support or refute that conclusion⁵. However, both consultants were aligned in the risk comparison of EWSI's PBR with that of the

³ While often used interchangeably, "rate of return" and "cost of capital" are distinct and actually represent two separate concepts. Rate of return refers to an *ex post* accounting concept that is effectively the return earned on an asset (rate base on the regulatory environment). It is measure of profitability that is usually determined through accounting records. Cost of capital is an *ex ante* economic and financial concept of expected or required return. It is an opportunity cost must be estimated from economic and financial data, rather the measured.

⁴ Page 20, Sussex Economic Advisors, Opinion and Report on the Rate of Return, June 6, 2016.

⁵ Page 142, Grant Thornton, EPCOR Performance Based Regulation 2017-2021 Filing Review, December 22, 2016.

AUC. As a result of these conclusions, both consultants concluded that a risk premium above the AUC generic was warranted.

Prior to the formal submission of the 2025-2027 PBR application, EWSI will provide Utility Committee with a report to review of the traditional methods for determining appropriate costs of capital as well as a discussion of the ways that the EWSI utilities assume greater business and financial risk than electric utilities regulated by the AUC. In addition to providing a foundation of the previous perspectives on cost of capital, the report will also present for consideration different approaches to determining an appropriate cost of capital for the 2025-2027 applications.

3.6 Equity

Equity, in this context, refers to just and fair inclusion—a condition where everyone has an opportunity to participate and prosper. Equity is achieved when life outcomes are not predetermined by racial, economic, or social identities. In water utilities, equity is achieved when all communities:

- have access to safe, clean, affordable drinking water and wastewater services;
- are resilient in the face of floods, drought, and other climate risks;
- have a role in decision-making processes related to water management in their communities; and

Both the City of Edmonton, in their long-range strategic plan, The City Plan, and EWSI recognize the importance of creating an inclusive and compassionate city, rooted in efforts to improve equity, end poverty, eliminate racism, and make clear progress towards Truth and Reconciliation.

The model of service delivery in the water industry is changing and evolving into emerging roles that focus on sustainability, social responsibility, and affordability. It is becoming increasingly important to ensure our policies, services, capital and operational programs are equitably designed and implemented. In order to ensure alignment with City of Edmonton goals and objectives in regards to equity, EWSI will provide a review of current operational programs and initiatives with an equity lens. From that basis, additional opportunities to increase equity will be assessed in order to facilitate the achievement of the underlying goals.

3.7 Metrics Review (Motion)

At the conclusion of the 2022-2024/26 PBR Application review, Utility Committee issued a motion for “a review of the performance measures to ensure they are increasingly stringent and challenging over time.” In response, EWSI will provide an analysis assessing the impact of

altering the current performance metrics structure and approach in order to align more closely with the stated intent of the motion.

As background, the current metrics framework was initially established at the inception of the water PBR in 2002 and had been adopted by both wastewater treatment and drainage services. The framework is based on a number of specific metrics grouped within over-arching indices to assess Water Quality (water only), Environmental Performance, Customer Service, System Reliability/Optimization and Safety. Each metric has an established “standard of performance” based on industry benchmarks, and where benchmarks are not available, on historic trending and targeted future performance. The benefit that ratepayers receive from the PBR metrics programs is the level of assurance they provide in establishing standards of performance and then ensuring that that level is maintained over the PBR term.

Historically, PBR metrics were established to ensure that a “standard” level of performance was maintained and not to incent increasing levels of performance (note - the expected level of performance in PBR materials are generally referred to as “standards” rather than targets – although the more conventional term “target” is occasionally used as it is the more common reference). In addition to being the established historic practice for EWSI’s PBR, this approach also aligns with AUC Rule 002, which similarly sets “minimum service quality” measures for utilities under that PBR.

Standards of performance do generally reflect increasing levels of performance from one PBR term to another as they are typically based on the prior 10-year average of actual performance. This allows the standards to reflect on-going operational improvements. However, there are some metrics where the standards may not be adjusted from one PBR term to another. This occurs when an increased level of performance is not warranted from a customer service or cost/benefit perspective. As an example, water quality far exceeds all public health guidelines and increasing levels beyond the current levels is costly and would provide no material benefits to consumers. There are also instances, such as with response time metrics, where customers have expressed no concerns with the current standard and the underlying factors make achieving the current standard more difficult over time without adjusting the actual standard.

In response to the motion, EWSI will provide an analysis of the implications of moving away from the current metrics approach to one based on increasing level of performance within a shorter timeframe than currently used. These implications will include the type and style of metrics appropriate under these conditions as well as the impact on rate-payers as the costs of increasing performance is reflected in rates.

3.8 Sanitary IRP and Wastewater Treatment IRP

The PBR applications present capital plans over the PBR terms. These plans are under pinned by much longer-term plans referred to as Integrated Resource Plans (IRP). EWSI has traditionally been progressive in its approaches to long range planning through the development of the Integrated Resource Planning (IRP) approach for the Water and Gold Bar operations. Most recently, the development of the Stormwater Integrated Resource Plan (SIRP) has been well received across the industry and is seen as a leading approach to adapt for the changing climate conditions expected in the future.

The IRPs typically define the infrastructure needs over a longer timeframe (20-40 years) as well as the underlying long term drivers of those requirements (population growth, consumption trends, policy choices for managing growth and other factors, technological advancements, etc.). These plans have been presented to the Utility Committee in the past just prior to the PBR application submission so that the PBR capital plans can be viewed in the longer-term context.

Prior to the upcoming PBR applications, EWSI will present both the Sanitary IRP for Drainage sanitary infrastructure and the Gold Bar IRP for wastewater treatment infrastructure. These plans will cover the longer-term growth plans for each utility and be informed by public engagement. The presentation of these plans also provides an opportunity to confirm that the IRP's in all areas are in alignment with the growth and development plans for the City and the Region in terms of population numbers and locations of growth nodes.

4.0 UTILITY COMMITTEE - APPLICATION REVIEW TIMING

EWSI proposes to file both the Drainage and Wastewater Treatment PBR applications for the 2025-2027 term, by June of 2024. This timing, as outlined in the chart below, will allow approximately 300 days from submission to when the new rates become active and is the timing that has been used for most applications in the past (note – the 2022-24/26 applications coincided with an election year, so the submission timing was approximately 4 months earlier).

2025-2027 Drainage and Wastewater Treatment PBR - Application Timeline

Activity	Proposed Timing		Notes
	Start	Finish	
Rates Report - (Application Submission)	-	31-May-24	
Councillor Information Requests (IR)	07-Jun-24	15-Jul-24	38 days for Information Requests
Administration, Utility Advisor - Information Requests	07-Jun-24	15-Jul-24	38 days for Information Requests
Public Submissions - Information Requests	07-Jun-24	22-Jul-24	Open for 45 days
EWSI's Response to Information Requests	22-Jul-24	05-Aug-24	14 days
Reports of Reasonableness by Administration and Utility Advisor	06-Jul-24	04-Sep-24	96 days to complete
EWSI's Response to Reports of Reasonableness	04-Sep-24	04-Oct-24	30 days to complete
PBR Public Hearing (Non Regular Committee Meeting)	07-Oct-24	31-Oct-24	Within these dates
PBR Compliance Filing	01-Nov-24	01-Dec-24	30 days to complete
Contingency	01-Dec-24	31-Dec-24	
First, Second and Third Readings - Bylaw Approval	01-Jan-25	15-Feb-25	45 days for schedule
Rates Implemented	01-Apr-25	01-Apr-25	

5.0 APPLICATION FORMAT

EWSI has historically followed a consistent structure and format for the PBR applications in order to provide consistency and ease of review from one application to another. Unless otherwise advised, EWSI intends to follow a similar course for the 2025-2027 applications (The Table of Contents from the most recent Wastewater treatment application is detailed in Appendix B for reference).

EWSI will submit separate applications for Drainage Services and Wastewater Treatment Services and provide all of the evidence supporting the requested rates for the upcoming PBR terms. Separate financial schedules for Drainage and Wastewater Treatment Services based on the minimum filing requirements (MFR) as approved by the Utility Committee in 2013 will be included. This standardized MFR was implemented in the 2017-2021 PBR applications and allows for comparability with these applications and with EWSI's PBR Progress Reports. The PBR applications will set out EWSI's operational plans for the upcoming PBR term in a similar format as previous applications.

Capital expenditure justifications for capital investments over the PBR term will be included. Formal business cases will be prepared for all projects and programs that are at or above \$5 million for Wastewater Treatment and at or above \$10 million for Drainage Services. The business cases prepared for each of the applications is anticipated to represent approximately 75% of the total capital expenditures for each business unit for the PBR term. Business cases for discrete projects will include an alternative analysis and business cases for programs will provide background on the program criteria used to determine the level of spending. Overarching strategies will be included for some larger initiatives to provide the context behind the various programs and projects needed to support the strategy (e.g. Stormwater Integrated Resource Plan and CORE).

Additionally the applications will include a common set of appendices that will include (but will not be limited to):

- Summary of key changes to the Bylaws;

- Expert reports to support key parameters in the PBR (such as cost of capital, productivity factors, EWSI credit rating);
- PBR progress reports for the previous PBR term;
- Business cases and post implementation reviews (for 2022-2024 approved projects/programs where spending is more than 20% over/under the initial PBR forecast);
- A stakeholder engagement report;
- Cost of service studies; and
- Depreciation studies.

to recover higher than forecast capital expenditures during prior term; (ii) adjusted going-in year operating costs to allow EWSI to pass on operating cost savings or increases attributable to the prior term; and (iii) capital expenditures planned for current PBR term.

5.4 Service Quality Measures and Penalties

Each utility maintains a number of performance metrics grouped under common indices, which are intended to ensure the maintenance of a standard level operational performance. Since 2002, these measures have been an integral part of performance-based regulation. These measures ensure that EWSI does not compromise customer service levels as it seeks to identify cost saving opportunities during the PBR period. 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 or wastewater treatment bill.

Any penalty arising will be applied to the fixed monthly service charge as set out in Bylaws. There is a maximum penalty of up to \$2,400,000 (\$1,000,000 for water services, \$1,000,000 for drainage services and \$400,000 for wastewater treatment services) that could be assessed if EWSI does not fully meet the performance criteria. The service quality measures are based on a 100 point system for each of water, wastewater and drainage and there points attributable to each index. By design, EWSI can obtain a maximum score of 110 points, although there is no reward for exceeding 100 points. Bonus points are allotted for performance above the standard. Although EWSI has been able to meet the service standards since 2002, the variation in scores achieved in each year indicates that the measures are challenging but achievable.

6.0 NON-ROUTINE RATE ADJUSTMENTS

EWSI assumes the forecast 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 Council or City Manager approval.

By example, if EWSI received approval for the costs associated with moving water pipes to accommodate a specific LRT alignment, and that alignment is subsequently changed, EWSI has the opportunity to request a non-routine adjustment. Under the performance-based regulation structure, the non-routine adjustment would be the mechanism through which the change is approved and rates adjusted. Non-routine adjustments are, by their nature unusual, significant in size or nature and beyond the scope of control of EWSI. Examples of the types of items that may be requested as a non-routine adjustment of rates include:

- Injuries and Damages
- Government Taxes Fees & Levies

- Government Regulation
- System Deterioration
- Franchise Fee Changes
- River Water Quality
- Customer Driven System Expansion
- City Requested Relocations

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. A business case supporting the request is typically provided to the Utility Committee prior to the NRA submission to the City Manager.

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