EPCOR Water Services Inc.

Proposed Return on Equity (ROE) and Efficiency Factor 2022-2026 PBR Applications

Utility Committee Meeting December 4, 2020



Determining the EWSI ROE – 2017-2021 PBR

- The City's consultant (Grant Thornton) recognized that:
 - EWSI's business risks are greater than the average Alberta electric/gas utility
 - It is reasonable to add a risk premium to the AUC's Generic Cost of Capital (GCOC)
- Utility Committee suggested EWSI work with City Administration to address the following two directions:
 - That the support to be provided for the rate of return and the productivity factor start as a baseline with the measures as determined by the Alberta Utilities Commission.
 - That Administration work with EPCOR on the following: Establish appropriate method to calculate the Efficiency Ratio prior to next Performance Based Rates.

Determining the EWSI ROE - Background

- Mid-2019
 - EWSI and City Admin discussions on a method to quantify the risk premium
 - formal RFI circulated to the consulting community
- January 2020
 - only two firms responded to the RFI
 - neither adequately defined a method to quantify the risk factors
 - no basis to adequately quantify and justify the risk factors
 - not an established industry practice
- EWSI concluded: attempting to quantify the risk factors to determine a risk premium is <u>not</u> the preferred course
- EWSI began to explore more traditional cost of capital approaches

Should the impact of the Global Pandemic be reflected in ROE?

- Market data (financial ratios, interest rates) have been highly volatile during 2020 – making it problematic to apply traditional methods for estimating cost of capital.
 - investors' required rates of return in 2020 have increased
 - when will the economic impacts of the pandemic will end?
- To avoid reliance on capital cost estimates inflated by temporary pandemic conditions, we propose to assume a return to "normal" conditions by 2022
 - propose to use 2019 (pre-pandemic) data and/or Consensus Economics forecasts for 2022 (post-pandemic)
- Given the limitations with applying traditional methods during the pandemic, we propose a straightforward update of the Grant Thornton 2016 ROE analysis.

Grant Thornton 2016 Review of EWSI's ROE for 2017-2021 PBR

- GT agreed to continue the 60% / 40% capital structure
- GT agreed EWSI's business risk is greater than average Alberta electric/gas utility
- GT applied an EWSI risk premium of 1.875% above the GCOC
- 2015 GCOC of 8.3% plus 1.875% results in the 10.175% approved ROE

_	2017 PBR	GT	Difference
Cost of equity			
Adjust average U.S. proxy group	10.340%	9.680%	-0.660%
indicated ROE to remove RPM			
results [1]			
Adjust U.S. proxy group to	10.450%	10.130%	-0.320%
remove ECAPM results [2]			
Adjustment to reflect higher	10.500%	10.12% to 10.42%	-0.08% to -0.38%
reduction in approved generic			
ROE's			
Excessive risk premium over AUC	2.200%	1.875%	-0.325%
generic rate			

EWSI has updated the GT 2016 analysis based on:

- 1. Most recent GCOC of 8.5%
- 2. EWSI risk premium of 1.875% (Grant Thornton 2016)
- 3. Changes in the long-term Government of Canada (GOC) bond yield from the 2018 AUC GCOC decision
- 4. Compression and expansion of equity risk premiums as bond yields vary

1. GCOC

- AUC originally set 8.5% for 2018 and applied to 2019 and 2020
- Recently AUC extended 8.5% to 2021 on a final basis

2. EWSI Risk Premium

- GT 2016 Report concludes: appropriate risk premium for water and wastewater operations is 1.875%
- What about a Drainage?
 - Drainage business has higher business risk compared to Water
 - longer capital recovery period, far greater proportion of contributed assets and higher operating leverage
 - therefore, EWSI risk premium for Drainage should be no less than 1.875%

3. Change in Long Canada Bond Yields

- 2018 yield underlying the 8.5% GCOC is 2.3%
- 2019 (pre-pandemic) yield was1.8%
- 2022 (Consensus Economics) forecast yield is also 1.8%
- Using either 2019 or 2022 yield results in a 0.5% reduction

4. Compression / Expansion Factor

- Equity risk premiums compress/expand as bond yields increase/decrease
- Historically, regulators assumed if bond yields increased/decreased by 1%, then common equity rates of return will tend to increase/decrease by 0.75%

PROPOSED ROE FOR EWSI 2022-2026 PBR (Tables 1 & 2 of EWSI Report)				
2019 LT GOC Yield (or 2022 Consensus Economics Forecast)	1.80%			
Less: LT GOC Yield underlying 2018 GCOC Decision	(2.30%)			
Bond Yield Change	(0.50%)			
X Compression / Expansion Factor	0.75			
Change in Common Equity Rate of Return	(0.38%)			
AUC 2019 (or 2021) GCOC	8.50%			
Plus: GT 2016 EWSI Risk Premium	1.88%			
Less: Change in Common Equity Rate of Return	(0.38%)			
Proposed Equity Rate of Return for EWSI 2022-2026	10.00%			

Proposal to Moderate Drainage Rate Increases

- We are striving to improve service reliability and implementing the SIRP/CORe programs while NOT exposing customers to overly-aggressive rate increases.
- To moderate rate increases, we propose to ramp up ROE over a 5-year period for "Base" operations
- 2022-2026 consolidated ROE of 9.10% is well below the target ROE of 10%.

Year	Water	Wastewater	Drainage Base	SIRP + CORe	Drainage Consolidated*	EWSI Consolidated*
2022	10.00%	10.00%	5.50%	10.00%	5.97%	8.06%
2023	10.00%	10.00%	6.63%	10.00%	7.11%	8.56%
2024	10.00%	10.00%	7.75%	10.00%	8.16%	9.06%
2025	10.00%	10.00%	8.88%	10.00%	9.11%	9.53%
2026	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
2022-2026	10.00%	10.00%	7.86%	10.00%	8.25%	9.10%

^{*}weighting based on preliminary rate base forecasts

Efficiency Factor Background

- The Efficiency Factor:
 - minimum amount the utility must improve efficiency to maintain its allowed ROE
 - usually declines over successive PBR terms to recognize the increasing difficulty in finding operational efficiencies
- EWSI had a declining efficiency factor until the 2007-2011 PBR term
- Efficiency factor for Water has been set at 0.25% since 2007
- EWSI's 2017-2021 PBR Efficiency Factor Evidence:
 - Dr. Kaufmann proposed negative 0.5% efficiency factor using industry established methods
 - EWSI proposed to maintain the positive 0.25% efficiency factor even while meeting higher regulatory, safety and environmental performance standards

Proposed Efficiency Factor for the 2022-2026 PBR

- We are **not** planning to engage a consultant to recommend an efficiency factor
 - underlying industry parameters have not changed
 - a negative efficiency factor would likely be recommended by the consultant
- We propose to maintain the positive 0.25% efficiency factor
 - to continue our commitment to find operating cost savings across all businesses (Water, Wastewater Treatment and Drainage) and
 - to align with City of Edmonton goals

Proposed Efficiency Factor – Drainage Considerations

- Aggressive efficiency targets already applied to Drainage operations the 2017 Drainage Transfer commitments:
 - executing the City's Drainage capital program at 10% lower costs; and
 - reducing Drainage operating costs by 5% below 2017 levels by 2021
- Drainage expects to meet these commitments by 2022
- Ramping the Drainage RoE substantially reduces Drainage's return below a level that is commensurate with its risk
- Drainage business is higher risk compared to the Water, which increases EWSI's overall business risk profile
- Increasing the efficiency factor above 0.25%, in combination with the ramped ROE, is seen as moving the risk/return profile beyond an acceptable level