

EPCOR 2022 PBR Applications Review by the Utilities Advisor

Introduction

This report is provided by the Utilities Advisor in response to the applications by EPCOR Water Services Inc. to establish performance-based rates for water, wastewater treatment and drainage services, effective April 1, 2022.

Executive Summary

The EPCOR applications seek approval to establish new customer rates and terms and conditions of service for Water Service (April 1, 2022-March 31, 2027) and for each of Wastewater Treatment and Drainage Services (April 1, 2022-March 31, 2025).

While the applications are generally of high quality, and the applicant has been forthcoming in responding to information requests, there are a few items that concern the Utility Advisor. Those items are discussed in detail in the following sections, and alternatives for dealing with the rate applications are provided at the end of the report.

The items of concern are:

- Rate of Return on Equity
- Business Cases
- Role of Utility Management versus Role of the Regulator
- Process of re-basing rates at the start of PBR periods

Rate of Return on Equity

Since the establishment of PBR regulation of EPCOR Water Services Inc., EPCOR has maintained that a just and reasonable rate of return for these utilities should be set higher than the Alberta Utilities Commission (AUC) generic rate of return. This

argument turns primarily on the higher risk that water, wastewater, and drainage services experience compared to gas distribution and transmission utilities and electric distribution and transmission utilities.

For the purposes of this discussion, there are two different ways to set rate of return for utilities. One is to attempt to quantify the risk facing the utility and to use this quantification to determine a premium over the risk-free rate of return. The second is to develop a generic rate of return for all utilities and then adjust the risk facing the utility through rate design and deferral accounts (deferral accounts operate in a similar fashion to Non-Routine Adjustments).

As experience has shown, the first approach is exceedingly difficult. In the last EPCOR PRB application, EPCOR used a rate of return expert. Upon review Utility Committee did not agree with the quantum of return proposed. Prior to this set of PBR applications, EPCOR attempted to find a consultant to quantify the risk premium of the EPCOR utilities over and above the AUC generic rate of return but was unable to find a consultant prepared to do so.

The second approach sets the generic rate of return for all utilities and then seeks out those risks that are specific to each utility and puts mechanisms in place to protect the utility from such risks. These risks are typically identified as items outside utility management control, of a significant amount, which cannot be managed by utility management.

This approach already exists with the EPCOR Water Services Inc. utilities. The existence of the Non-Routine Adjustment (NRA) process is such an example. For example, a city decision to require re-routing of utility assets for the purposes of rapid transit expansion is not within utility management control, will result in significant costs to be borne by the utility, and has no reasonable risk-mitigation approach.

The major risks for EPCOR Water Services are consumption and rainfall.

The consumption risk can be managed by closely aligning rates with cost of service. EPCOR water rates are not closely aligned with cost of service.

An accepted regulatory principle is to avoid rate shock, which is usually defined as a change to rates more than plus or minus 5% annually. EPCOR could reduce its risk

associated with consumption by moving rates closer to cost of service over a phased in period of time. A phased in approach to modifying rates would reduce risk over time.

A second approach would be the establishment of a consumption deferral account. This approach has been used with natural gas utilities in recognition that consumption is closely correlated to weather. Like a Non-Routine Adjustment, rates would automatically be adjusted to keep the utility whole due to differences between forecast and actual consumption. Customers would benefit from lower rates due to a lower rate of return but would experience less stability of rates. It is up to the regulator (not the utility) to determine the balance between lower rates and rate stability.

Similar approaches are available to manage rainfall risk.

In Information Request UA-EWSI-8, the Utilities Advisor asked if EPCOR's proposed adjustment to increase the monthly service connection fee to increase the fixed revenue received by EPCOR would be accompanied by a reduction in rate of return. EPCOR replied that while arguments could be made to reduce EPCOR's rate of return to reflect lower risk, EPCOR has not proposed to adjust the rate of return. EPCOR argues that the small increase in revenues over a five-year period does not warrant an adjustment to rate of return. The risk in such an approach is that by trivializing individual items of risk reduction, the overall impact of several such adjustments will be lost.

As it stands, EPCOR Water Services Inc. approved rates of return have been outliers in the regulatory scene in Alberta. Gas, electric and water utilities all face different risks. The AUC has concluded that long and contentious debates on rate of return during regulatory proceeding are not a productive use of regulatory time and have adopted a generic rate of return for gas and electric utilities. The differing risks faced by gas and electric distribution and transmission utilities are managed through regulatory processes to provide the utility operator with the opportunity (not the guarantee) to earn a reasonable margin of profit. A similar approach could be applied to EPCOR Water Services.

Business Cases

As the Utility Advisor has pointed out many times, utility business cases should include the investigation of reasonable alternatives, justification if there are no reasonable alternatives to the proposed capital project, and the cumulative net present value of

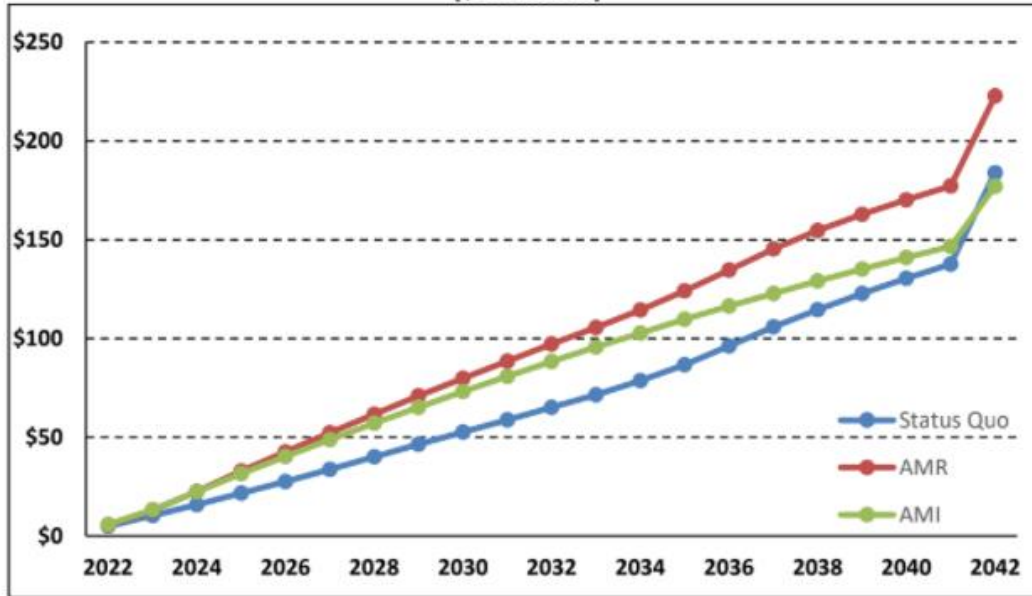
revenue requirements by year for all alternatives considered. The business cases presented by EPCOR fall short of meeting these requirements.

In Information Request UA-EWSI-18, the Utility Advisor asked why so few of the business cases presented advance to the stage of preparing a financial analysis of viable alternatives. EPCOR's response confirmed that of the 17 Drainage business cases, only one is for a capital project, and the remaining 16 are for capital programs. EPCOR does not provide NPV analysis as part of the business cases for capital programs.

With all due respect, the requirement for business cases supporting capital investment is not set by EPCOR. The requirement for business cases is set by the regulator. This requirement can and should include expenditures under capital programs. The Utilities Advisor recommends that the regulator review capital programs during each application to determine if there is evidence that the capital program is still required, and if the proposed expenditures are prudent. The regulator should consider setting a threshold dollar amount for capital programs above which a full business case would be required.

The Utility Advisor has repeatedly requested the inclusion of a graph of NPV of revenue requirement for each alternative evaluated in a business case. In response to Information Request UA-EWSI-9, EPCOR provided the following graph:

Chart UA-EWSI-9-1
AMI Deployment Project
Cumulative NPV of EWSI Revenue Requirement for each Alternative
(\$ millions)



Note that the steepening of the curve between 2041 and 2042 reflects the terminal value of the metering assets at the end of the study period.

This chart shows a straight-forward analysis. However, this is not always the case. Some projects will show a favoured option with a lowest long-term NPV, but a much higher NPV in the short-term. Such projects are inherently riskier than projects where the favoured option has the lowest NPV over the duration of the analysis. The analysis of such risk should be part of the business case, and the graphical presentation as shown above is the easiest way to identify such risk.

In cases where there is only one viable solution, it is important to present the Cumulative NPV of revenue requirement. The Cumulative NPV of revenue requirement is calculated from the capital expenditures, operating and maintenance expenses incurred because of the capital expenditures and operating and maintenance expenses avoided because of the capital expenditures. A key element of rate regulation is the regulator’s confidence in the utility’s forecasts. Without this financial analysis, the regulator finds it difficult to assess the accuracy of the utility’s forecasts.

As an example, if a capital investment is justified on a reduction of operations and maintenance expenses over time, it is fair game for the regulator to compare the estimated reduction in operations and maintenance expenses to those achieved over time. The purpose of such an analysis is not to second guess decisions (retroactive ratemaking), but to assess the confidence the regulator should place in the utility's forecasts.

Role of Utility Management versus Role of the Regulator

In Information Request UA-EWSI-2, the Utilities Advisor requested the historical basis for the decision to reduce EPCOR's GHG footprint within the city by 70% from 2021 levels by 2025.

EPCOR responded that the decision was an environmental leadership decision reached internally. EPCOR then provided specific examples of individual initiatives supported by the regulator and directed by the City of Edmonton.

The Utilities Advisor does not disagree with this decision. However, the Utility Advisor is concerned that the decision as taken and presented in the application short-circuits the role of the regulator in approving programs (as compared to individual initiatives).

Where utility management has decided to implement a program (as opposed to a single initiative) that will impact customer rates over time, the utility should advise the regulator specifically of the plan, and the forecast future costs of the plan and give the regulator the opportunity to understand the program, the associated costs, the associated benefits, the compliance with previous regulatory directions, and to approve the program. In the absence of UA-EWSI-2, not all this information would have been provided to the regulator in a single comprehensive manner. In the future, the establishment or adjustments to such programs should be presented for explicit approval by the regulator.

Process of Re-basing rates at the start of PBR Periods

In the applications, the applicants propose to set 2022 rates based on actual rates contained in their applications, rather than a formulaic adjustment of 2021 rates. This is

standard practice for ongoing PBR regulatory regimes, and the Utilities Advisor supports this approach.

Alternative for Dealing with the Rate Applications

As with any utility rate applications, the regulator has the choice to:

- Approve the application as submitted.
- Approve the application with adjustments quantified by the regulator.
- Require a refiling of the application with adjustments required by the regulator which require utility analysis to quantify (commonly referred to as a compliance filing).
- Reject the application.

If the chosen approval process extends the approval date past the date on which new rates are to be implemented, the regulator can set interim refundable rates which can be trued up once the final rates have been determined.

It is up to the regulator to determine its regulatory approach once the application has been received, Information Requests have been sent and returned, evidence presented by any other interested parties has been received, and oral testimony of the applicant has been obtained.